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OBSERVATIONS
ON THE
MEANS OF EXCITING A SPIRIT OF
NATIONAL INDUSTRY;
CHIEFLY INTENDED TO PROMOTE THE
AGRICULTURE, COMMERCE,
MANUFACTURES, AND FISHERIES,
OF
SCOTLAND.

IN A SERIES OF LETTERS TO A FRIEND.
WRITTEN IN THE YEAR ONE THOUSAND SEVEN HUNDRED AND
SEVENTY-FIVE.

BY

JAMES ANDERSON,
AUTHOR OF THE ESSAYS RELATING TO AGRICULTURE AND RURAL AFFAIRS.

Resolve, resolve, and to be men aspire.....
Let godlike Reason, from her sovereign throne,
Speak the commanding word I WILL, and it is done.

THOMSON.

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TO HIS GRACE
THE
DUKE OF BUCCLEUGH,
THE FOLLOWING OBSERVATIONS,
TENDING TO PROMOTE
THE
AGRICULTURE, COMMERCE,
MANUFACTURES, AND FISHERIES,
OF
SCOTLAND;

ON THE PROSPERITY OF WHICH,
THE WELL-BEING OF EVERY INDIVIDUAL IN THAT ANTIENT KINGDOM
MATERIALLY DEPENDS;

AND
TOWARDS THE IMPROVEMENT OF WHICH
HIS GRACE,
AT A VERY EARLY PERIOD OF LIFE,
HAS SHEWN AN ALMOST UNEXAMPLED DEGREE OF ATTENTION:

ARE,
WITH THE GREATEST RESPECT,
MOST HUMBLY INSCRIBED

BY
THE AUTHOR.





P R E F A C E.

IF the writer of the following letters had known less of the world, he would have offered them to the public with less reluctance than he now does. Youth is sanguine in its expectations, and hopes that mankind in general will enter warmly into any plan for improvement that may be proposed with a rational prospect of success: but experience corrects these first intemperate fallies, and throws a chilling damp upon the mind, when it recollects the many bars that unavoidably come in the way of every generous undertaking.

It is vain to hope, that the institutions of such a fallible creature as man is, can ever be perfect; it is equally foolish to expect that any proposed improvement will be faultless. There is, therefore, room for continual improvements; but there is not at all times an equal chance for these improvements taking place. Every stage in the progress of civil society, is naturally fitted to encourage some peculiar passions more than others. The nature of the predominant passions determine the nature of the vices that most prevail;

prevail; and these necessarily determine the nature of the virtues of the times. Hence it happens, that although truth and virtue remain for ever the same; yet to us, who view them through the medium of these ever-varying passions, they seem to be perpetually changing. What obtained the highest applause in one age, is viewed by the next with the utmost indifference, and another set of ideas comes to be accounted honourable, which were formerly held in abhorrence, or considered as the disgrace of the human species. In this manner, although truth and reason gradually prevail in some particulars over prejudice and error, mankind in other particulars adopt new prejudices, and fall into errors formerly unknown, which come gradually to be combated and supplanted in their turn. Happy is it for that nation, in which the prejudices that are coming into fashion, are of a nature less destructive to society than those that are falling into disrepute!

If we take a retrospective survey of the changes that have taken place in Europe in respect of this particular, we shall find, that before the art of government was well understood, and while the arm of the civil magistrate was too weak to compell individuals to submit to the salutary correction of the laws,
each

each turbulent leader of a band of robbers exercised within his own precincts, an almost unlimited authority, which subjected those who had the misfortune to incur his displeasure to the most unjust oppressions, sometimes to the most wanton exertions of barbarous and unrelenting cruelty.

In these circumstances the injured sufferer, seeing no earthly power to which he could apply for relief, was under the necessity of either tamely submitting to the will of the oppressor, or of depending upon the vigour of his own arm, or that of some bold adventurer, for redress. This roused the soul to deeds of daring hardihood, and gave occasion for those amazing feats of heroism which so eminently characterise, what we call the middle ages. The universal applause that was bestowed upon such men as rescued the injured from oppression, was an irresistible spur to those daring minds, which panted after glory, and made them strain every nerve to obtain that high prize for which mankind have in all ages most emulously contended, and produced such exertions of disinterested generosity and heroic valour as are now accounted fabulous, because they seem so far to exceed the present human powers. The annals of those times are blotted with vices that make the
mind

mind shudder with horror; but the virtues which then adorned individuals were great, and manly in extreme. The soul was impetuous, but not debased; the judgement was uninformed, but the will upright, and the errors into which these romantic heroes fell, were oftener those of the head than of the heart.

In an after period, when mankind, sick of the disorders that spring from anarchy and misrule, were desirous of obtaining those blessings that result from a well-ordered government; when the mind, freed at length from the fetters in which it had been long enthralled by the artful impositions of an ambitious priesthood, began to develope its powers, to feel its own importance, and to assert those unalienable privileges to which it found itself intitled; the charms of liberty appeared to be so irresistibly engaging, that nothing seemed too great to be sacrificed for attaining it, and therefore it was pursued with an intenseness of ardour that no opposition could resist. In these circumstances individuals, forgetting their own particular danger, emulously contended who should be foremost in exposing themselves in defence of the community at large. Patriotism was not then an empty name, but an active invigorating principle, that warmed and elevated the soul with a firm and
manly

manly fortitude, which those who could not imitate, were forced with reverence to admire.— But soon was this genuine principle corrupted, and by the arts of designing men was converted to the worst of purposes. The same age produced a Hampden, a Russell, a Sydney, and — a Cromwell.

At length the auspicious æra arrived, when the constitution of this country was secured upon the broad and stable base of universal liberty; when the laws became binding to the King upon the throne, and accessible to the beggar on the dunghill; when property was perfectly secured, and “every man could sit under the shade of his own fig-tree, and eat the fruit of his own vine.” In these circumstances there was no longer room for exercising those acts of private heroism that were almost unavoidable in former ages. The disinterested ideas that necessarily accompanied these, came to be gradually less and less cherished, and at length became so utterly unfashionable as to be stigmatized with the now despised epithet *romantic*. An extended commerce introduced riches, and riches luxury. The mind, no longer alarmed with the fear of being, by violence, deprived of those blessings it held most dear, forgetting the care of *defending*, became only studious to *enjoy*. When man

no longer stood in need of the immediate assistance of his fellows, to ensure his own personal safety, he became less anxiously solicitous about the private welfare of others; and he had often occasion to view his neighbours in the disgusting light of *rivals*, instead of the more endearing connection of friends and *protectors*. Having thus no object from without to employ the active faculties of the soul, it is left at full liberty to attend to its own private concerns with unremitting care; so that *self* naturally becomes the principal object of attention; and things are deemed valuable, or the reverse, chiefly as they minister more or less directly to the wants of this new *idol*. On this account *money*, which, in an advanced state of civil society, ministers directly to the wants of every individual, is universally prized as the highest good on earth; and by consequence the means of accumulating *wealth*, become the chief occupation and principal study of mankind. In these circumstances the interest of one man frequently interferes with that of another, by which means the *social* affections are still farther obliged to give way to the *selfish*: but as the efforts of every individual to serve himself, would be retarded by an open discovery of these affections, it becomes his interest to conceal them, so that the most rancorous malevolence of heart is often concealed

cealed under the appearance of the warmest friendship; and it is in this state of society an undisputed maxim, that

Scavoire vivre est scavoire feindre.

Such are the necessary changes that are produced on the opinions and pursuits of men, by their advancement in knowledge, and improvement in the arts of government.

It would seem that societies, as well as individuals, have their youth, manhood, and old age; each period possessing a set of sentiments, affections, and passions, peculiar to itself, in the one case, as well as the other; the passions peculiar to each of the stages in the progress of society, bearing a remarkable similarity to those belonging to the corresponding stages in the progress of human life.

Thus, in the infancy of society, as well as of man, youth, active and unquiet, emulous of glory, and regardless of danger, rushes precipitately forward from one extreme to another, and glories in great and daring acts of what it deems heroism, without being anxiously solicitous about distinguishing nicely between what may be truly or falsely so called. Candid and

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unfuspicious, the heart glows with benevolent affections; and disinterested generosity of sentiment is the distinguishing characteristic of this period.

But when societies begin to attain stability,—when manhood approaches, wisdom and experience begin to inspire more cautious circumspection.—The undistinguishing glow of ardour and benevolence then comes to be more judiciously circumscribed, and the mind selects with care objects upon which it may be properly exerted. Its exertions are more steady, but more confined. Those objects with which we are more nearly connected, come to claim our principal attention. Family,—Country,—are names that denote connections which rouse all the tender, all the active faculties. No toil seems to be too great, if it tends to ensure their felicity, and secure their stability. *Self* is in some measure forgotten in attending to these dearly-interesting objects, and the mind still goes forward with a steady regulated ardour, accompanied by Hope, and entertained with the glowing prospects she successively displays to the pleased imagination.

But when, in consequence of the vigorous exertions of youth, and steady perseverance of manhood, many of those blessings have been obtained which
feemed

seemed at first so highly desirable, the mind, for want of employment, begins to flag. Age steals slowly on. The chilly blood scarce creeps along the veins. Honour and glory are now no longer capable of rousing the sympathetic affections. Family, — Friends, convey to the mind no invigorating sensations. Feeble nature, in need of support from every hand, can spare no attention to others, and every art is tried to restore a taste for former enjoyments; but in vain. Plenty in vain displays her long-collected stores. Cloyed with superabundance, Fancy only longs for that which, when obtained, Nature loaths as nauseous; till at length, incapable of any real enjoyment, the mind sinks into a state of torpid indifference to all.

Unhappy the individual who thus survives himself!
Unhappy the community which approaches to this state of decrepitude and weakness!

Whether or not Britain is yet arrived at this period of political decrepitude, will not, I hope, admit of a dispute. I believe she is yet at a considerable distance from it. But that she is already past the meridian of life; that her active struggles are now over; and that she is declining into that state of listless

less lassitude which proceeds from inaction, and leads to indifference, will not, I imagine, be denied. Is it not therefore vain to expect, that such vigorous exertions of public spirit should now be made as were admired in former times? Is it not foolish to think of exciting in individuals desires so incompatible with the affections peculiarly appropriated to that stage to which we are advanced in the progress of civil society?

No one who shall read these pages, can be more sensible of the force of this objection, than the writer of the following sheets; and it was from a full conviction of its powerful influence, that he wished to confine his lucubrations to the narrow sphere for which they were originally intended. Whether he, or his friends, who have differed in opinion from him in this respect, have judged rightly, a few years experience will discover.

In the mean time, it might be urged against the objection, that although it is perhaps in vain to expect, that a regard for the public good should be capable of stimulating any considerable majority of the nation, to perform *actions* similar to those that have been common in former times, they may still be pleased

fed to talk and speculate upon the subject. To such persons this performance may afford a fund at least of innocent amusement.

There is, says some one, a pleasure in madness, which only madmen know. There are some kinds of sensations which have such irresistible power, as to whirl the mind forward with a wild delirium of ecstasy, into scenes so ineffably delightful, as are capable of excluding for a time all other ideas whatever; the recollection of which, like that of a pleasing dream that is past, continues to be always agreeable to the fancy. That heart is indeed callous in extreme, which does not look back with pleased complacency to those early scenes of youthful love, when the tender unsuspecting heart indulged without controul the sympathetic affections; and, lost in an elysium of ideal bliss, knew no other employment, save that of forming fairy plans that angels might be ambitious to execute. If novel-writers afford entertainment, chiefly by painting scenes that give room for mankind to indulge this tender propensity, why may not those who endeavour to recal other sensations of a pleasing kind, hope to meet with some degree of indulgence?

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There is not perhaps any affection of the soul that bears more universal sway among vigorous youthful minds, than disinterested philanthropy, and universal benevolence to mankind. Many are the lessons necessary to be given, and severe the examples inculcating these, before the ingenuous mind can be brought to confine its benevolent exertions within proper bounds; and it is not without the most poignant regret, and lingering delay, that it can be brought to acquiesce in the prudential admonitions of age and callous indifference. Nor is it possible for some persons ever so far to forget the delight that they enjoyed from the indulgence of these beneficent affections, as not to feel their minds glow with a sort of divine ardour, when a scene is opened, in which it appears that they may be, without imprudence, indulged. Such persons may, if they please, consider this book as a sort of patriotic novel, which may serve to amuse them, although the plans it suggests should never be realized, and may help to pass a few agreeable hours, by allowing them, without prejudice to their worldly affairs, to indulge for a short time those pleasing affections, from the exertion of which they have reaped more genuine delight than from all the other enjoyments of life. After they have dreamed away a few hours in the reveries which it will suggest, they may
lay

lay it on the shelf, and plunge once more into those tumultuous scenes in which their heart tells them they have no enjoyment.

Nor is it wrong to try to keep alive the seeds of these affections ; nor will those *sublime geniuses*, who laugh in secret at men whose actions are really influenced by motives of this kind, disapprove of the attempt. Like a principle of religion, a spirit of patriotism is an exceeding convenient thing to prevail among the lower orders of the people ; and however much the *choice spirits* of the age may themselves dread the fetters that these would impose, and therefore disregard them ; yet they will allow it is extremely convenient *for them* to have others in trammels, that they may be the more easily led about at pleasure. On these accounts my attempt ought to meet with the approbation of these *most sublime* philosophers.

To others, of less exalted sentiments, other arguments might be adduced, better adapted to their more limited capacity, that should satisfy them, that an attempt to keep alive a spirit of disinterested patriotism deserves to meet with their approbation. Even the most selfish must, upon their own principles, approve

of this attempt, if I can prove that it is compatible with the genuine spirit of pure *selfishness*; which I do as follows.

All mankind wish to attain happiness: nor is it possible for any creature endowed with life, to divest itself for one moment of this original bias impressed upon all animated nature. Man, single and alone, is a feeble helpless creature. He has neither the strength of the elephant, nor the swiftness of the stag; and in the little arts of cunning, to which he must have had recourse, he would perhaps have been exceeded by the fox or wolf. But, with the aid of his fellow-men, he has become the lord of the creation. The sturdy elephant is taught to bend at his command; and all the creatures of the field are made to minister to his wants. It is from society, therefore, he derives that exalted pre-eminence he enjoys; and to society he must fly for protection on all emergencies. Nor is a matter of so much importance to his preservation left to the discovery of his own sagacity, or to the fallacious decisions of reason alone; but it is pointed out to him by original feelings, so strongly imprinted on the human mind, that no mode of education can totally repress, nor any fashion however predominant, nor any system of reasoning however

ever

ever plausible, can ever entirely eradicate. Hence it happens, that although, by the aid of human laws, a man may be so effectually secured from the fear of injury, as never to have occasion to *feel* his own natural weakness ; although he may be thus prevented from being immediately sensible of the very great obligations he lies under to others, nor be capable of perceiving, in a clear enough manner, how much his own preservation and well-being depends upon the prosperity and happiness of all the other members of the community to which he belongs ; although he may in these circumstances be in danger of disregarding his fellow-subjects, and of pursuing those measures only which should promise to minister directly to his own single advantage, however prejudicial they might be to all around him ; although he may thus be induced, in consequence of ignorance, and erroneous reasoning, to indulge the selfish instead of the social affections, which would have a direct tendency to destroy that very security on which he originally relied with such unsuspecting confidence, and which would render him an easy prey to any one who might chuse to attack him ;—yet the voice of Nature is so irresistibly powerful as cannot be suppressed, and he finds it impossible to proceed in his little selfish plan. Happiness, the great object of his wishes, perpetual-

ly eludes his grasp ; and he feels, that in the possession of *millions* no enjoyment affords unmixed delight, but the conscious recollection of past actions of justice and beneficence, or the inward wish to promote to the utmost of his power the general felicity of others.

He is thus forced, almost in spite of himself, to pursue those disinterested plans that are most essentially necessary for his own preservation ; and although he may be blinded for a time by the blandishments of pleasure, so as to wish for riches as the only good, or to sigh for power as the most effectual means for obtaining happiness, he will be forced at length to own, that these are but unreal phantoms, whose possessions afford him no substantial delight. The ghosts of departed hours still haunt the imagination of man, and with them bring the recollection of past events, heightened by all the exaggerated colouring of an enflamed imagination. If, in obtaining unbounded treasures, the sacred rights of humanity have been abused ; if millions of lives have been wantonly sacrificed in order to fill the coffers of one man ;—is it surprising, that the recollection of these miserable scenes, which perpetually return with accumulated degrees of horror after each short interval of criminal dissipation, should harrow up the soul,
and

and embitter every enjoyment to such a degree, as to render life itself intolerable? Or need we be surprised, that the humble swain, whose hours roll on in innocence and peace, and whose pleased imagination at every leisure-hour brings back the recollection of past acts of tender beneficence, should spend with joy the live-long day, and at each returning morn pour forth his heart in grateful orisons to that beneficent being who hath bestowed upon him so many comforts in this life?

If then happiness is the desire of every soul that lives, and if disinterested beneficence is the only possible mean of attaining it, we must conclude, that the disinterested man, while he seems to forget himself, is most effectually ministering to his own wants;—and that the selfish man, who thinks at once to attain the object of all his desires, is only busied in throwing difficulties in his own way, which retard his progress at every step, and effectually prevent him from ever obtaining it.

Weak, however, is the voice of reason, when opposed by the allurements of pleasure. Desirable objects, when present or near, are represented by a heated imagination, as so much more engaging than
they

they really are, while those at a distance appear so faint, that, when put in competition, the one is grasped at with an irresistible eagerness, while reason in vain attempts to call off the attention to the other. There does not live one man, who has not had too often occasion to cry out in the striking words of the poet,

*Video meliora, proboque,
Deteriora sequor.*

Were it not, therefore, for the voice of Nature, which cannot long be suppressed, man might be hurried into the most destructive measures for himself, in spite of that reason of which he so often and so vainly boasts; and all those political institutions which he thinks so strongly mark his wisdom, would be infallibly destroyed by diseases that are derived from their own perfection. But while under the protection of these human laws he thinks himself secure; when his barns are full, and all his goods secured, and he says to his soul, "Thou hast much
" goods laid up for many years; take thine ease; eat,
" drink, and be merry;" and prepares to plunge into all the luxurious excess of criminal delights, this inward monitor becomes an eternally unwelcome intruder, and often tears him from his fancied pinnacle
of

of power, and tumbles him headlong into the irremediable gulf of misery and despair, to furnish an awful lesson to those around him of the impossibility of disregarding the genuine feelings of nature with impunity.

Such are the means that Heaven hath ordained for repairing the injuries that result from the most perfect political institutions of man; and were it not for the secret, though uninterrupted influence of the eternal laws of disinterested beneficence upon many individuals in every community, the revolutions to which nations are subjected would be much more frequent than they really are. It is not, therefore, a fault to endeavour to cherish these affections in the minds of the people.

Such are the arguments that might be alledged in excuse of this publication, and such are the principal reasons that induce the author, in spite of the obloquy it may throw upon him, perfectly to agree with the poet, (for poets are not always the worst philosophers), in thinking that

*Nè disastri d'un regno
Ciascuno à parte: e nel fedel vassallo
L'indifferenza è rea.*

Metaasio, in Artaserse.

which,

which, on account of the unfashionableness of the sentiment, he chuses to leave in the obscurity of the original.

Thus far had the Author written with an intention to have made this an anonymous publication. But when he reflected, that in some places of his work he has had occasion to controvert the opinions of some living authors who have acknowledged their performances, he thought it had somewhat of a mean and disingenuous appearance to keep himself concealed : and although he shall never contend with any one for the sake of victory ; yet to wipe off the most distant appearance of any thing unmanly, he immediately resolved to avow it. His chief reasons for having ever wished to remain concealed, were, to avoid drawing upon himself the effects of the ill-humour that may arise in the minds of such persons as may find themselves hurt by any of the observations that are contained in the following work, and to shun the idle tattle of *busy-bodies*, who are ever ready to disturb the repose of one who wishes to indulge, in a quiet retreat, the unenvied tranquillity which a silent mediocrity in all respects most effectually ensures.

To the *first* he would say, That he was induced to
I write,

write, partly to amuse himself, and to pass in an agreeable manner a few leisure-hours, which he found hang rather heavy upon his hands in his solitary retreat ; partly to please a friend ; but chiefly because he was not only better acquainted than most persons with almost all the most material facts on which the reasoning in the following pages is founded, but also because he was fully convinced of the very great importance of many of the particulars here treated of to very many individuals who are not capable, or willing, to judge of them without assistance ; and that nothing could be farther from his intention than to give offence to any one. He has indeed on all occasions delivered his sentiments with that warmth and undisguised sincerity that was natural between intimate friends ; nor has he, upon a revival, thought it necessary to soften his expressions so much as would perhaps have been unavoidable if they had been originally intended for the public : but on all occasions he has confined his observations to the objects themselves, and has never made allusions to any person who may have been accidentally connected with these objects. He was even studious to avoid, as far as was possible, connecting in his own mind any persons with the facts on which he has had occasion to animadvert ; so that for the most part he really does

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not know who are the persons that are or are not connected with the several measures he either approves of or condemns. But if he did know these particulars, he would deceive himself if he could be induced to bestow any applause upon a measure that his reason condemned, if it should be supported by the best friend he ever had in the world, nor bestow the smallest censure upon another measure that seemed to him praise-worthy, although it had been promoted by the man he most detested. He knows no man that is free of faults; and he hopes never to meet with one who is altogether destitute of merit. Why then may not the accidental failings of good men be admitted, without derogating from their virtues? The best are ever most ready to allow of this. And why should the bad be deprived of the small tribute of applause that they may have justly merited? A man of a liberal turn of mind, is happy at having it in his power to do justice to the last, because it helps to give him a more pleasing idea of the natural rectitude of the human mind. He has no reluctance at correcting the errors of the first, because he knows it cannot derogate from their justly acquired fame, and will merit and obtain their thanks.

He,

He, therefore, that delivers his sentiments on interesting points with freedom, void of malevolence, cannot give offence to dignified minds; and he who has not vigour of mind to dare to do so on all occasions, never ought to handle any political subject. For these reasons, without either fear or favour, without the knowledge of any party, or the smallest desire to please any one set of men in preference to another, the Author has gone right forward, and has praised or blamed whatever he thought deserving of it; nor is afraid that he will meet with the censure of the worthy part of mankind, even where they may find it necessary to correct his errors.—But if he thought there was one sentiment in the whole of this performance that was dictated by a spirit of malevolence, he would sooner submit to have the hand which writ it chopped off, than suffer such a passage to go to the press, and spread abroad his own shame throughout the world.

To the class of idle cavillers, he would apply a saying of a man, who, like himself, had stepped a little out of the line to which his neighbours thought he ought invariably to have confined himself; who, sporting with that idle curiosity which is

always excited on these occasions, hung out to their view, in a conspicuous place, the three following sentences successively, one day after another :

They say,

What do they say ?

Let them say.

MONKSHILL, March 18.

1777.

CON-



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L E T.

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is

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- p. 36. l. 7. for insignificancies *r.* insignificance
 50. line penult, for be *r.* lie
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 91. Notes l. 2. & 3. for vicunas, d'alpueas--amas *r.* vicunas, d'alpucas--Lamas,
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 102. l. 14. dele closeness and
 * 123. Note l. 4. for animals *r.* vegetables
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 205. Note l. 1. *r.* January to June
 * 206. Note l. 1. for situated *r.* and
 225. l. 21. for in *r.* to
 227. l. 36. for towards *r.* to
 229. l. 2. for that *r.* the woollen
 234. l. 10. for fence *r.* fence
 236. Note l. 10. for huberjets *r.* haberjets
 237. Note l. 2. for invention *r.* discovery
 254. Notes l. 12. for lanes transportandes *r.* lanis transportandis
 290. Note l. 17. for proportionably *r.* proportionally
 * 352. l. 4. for unable *r.* enabled
 368. l. 18. for with all *r.* with almost all
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 370. l. 21. for They *r.* These laws
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 * 411. l. 21. for bottom, if it admits *r.* bottom: It admits
 412. l. 11. for forgot *r.* forgotten, and l. 17. for of the men *r.* of men
 * 419. l. last, for property so *r.* property; so
 420. l. 10. for state mental *r.* state of mental
 425. l. 8. for trained regularly, perform *r.* trained, regularly perform
 428. last line, for which honey *r.* which that honey
 429. l. 21. & 22. dele than any others
 492. l. 18. for raising *r.* rising
 496. l. 7. for entrepost *r.* entrepot.
 * 504. l. 8. for Table III *r.* Table II.

* The reader is intreated to correct the errors marked thus * with the pen before he begins to read, as they materially affect the sense.



OBSERVATIONS
ON THE
MEANS OF EXCITING A SPIRIT OF
NATIONAL INDUSTRY;
CHIEFLY INTENDED TO PROMOTE THE
AGRICULTURE, COMMERCE,
MANUFACTURES, AND FISHERIES,
OF
SCOTLAND.

SCOTT & BOWNE
MANUFACTURERS AND FISHING
APPLICABLE TO ALL
NATURAL HISTORY
OF THE UNITED STATES
OF AMERICA



OBSERVATIONS

ON THE

ON
different ranks of persons in the Highlands of Scotland, a cause of
much anxiety;—chiefly occasioned by a variation in the customs,
and a change of manners in the people, since the abolition of serf-
NATIONAL INDUSTRY.

LETTER FIRST.



C O N T E N T S.

Preliminary observations.—Discontents and mutual jealousies between different ranks of persons in the Highlands of Scotland, a cause of much uneasiness;—chiefly occasioned by a variation in the customs, and a change of manners in the people, since the abolition of private jurisdictions, and the consequent civilization of the country.—The inhabitants in want and penury.—Impossibility of supplying these wants by any increase of agriculture.





OBSERVATIONS

ON

NATIONAL INDUSTRY.

LETTER FIRST.

To Mr ***** London.

DEAR SIR,

HAVING been from home for some time past, on a tour through the North Highlands, I did not receive your very kind letter of the 20th of July, till two days ago; which is the reason I did not write you sooner.

I very much regret that the situation of your family did not permit you to prosecute your intended jaunt farther than Edinburgh;

burgh; as you would have received fuller information on the spot, as to those particulars you are anxious to be informed of, than you can hope to obtain at second hand. You would likewise have seen a country so totally different from any thing you have ever beheld, and a people so unlike to those with whom you have hitherto conversed, in manners and customs, as could not fail to give rise to many interesting reflections in a mind of such an enlarged philosophical cast as yours is.

But since it is impossible for any man to obtain every thing that might be agreeable to him, it behoves him not to repine at the want of what may be placed beyond his reach; but rather, like you, when prevented from obtaining knowledge in the best way in which it can be communicated, strive to obtain it by such means as still are within reach; that thus he may never remain altogether stationary, but still be advancing a little, although it may be more slowly than could be wished for.

I shall, with pleasure, not only communicate to you all that I know relating to the present state of the Highlands of Scotland, and the causes of the emigrations from thence that have of late made so much noise in the world, about which you seem to be so very desirous to be informed; but as those particular national distresses that press heavily at one time may, by some sudden and unexpected event, be totally removed, while other inconveniencies arise that may be equally destructive to the community, I should think that I had but ill performed the task you require, should I confine my observations to a particular grievance, that may perhaps have disappeared before the ink shall be dry with which I write this letter. For this reason, although I shall not overlook the circumstance that seems to have particularly engaged your attention,

tention, I shall endeavour so to explain it, as to give you a full view of those radical political defects, which have not only given rise to this evil, but from which other evils will continue to arise after the very remembrance of this particular one shall have totally passed away; and shall point out such a plan of conduct as seems necessary to be pursued by those who mean effectually to ward off similar distresses from their fellow-creatures for the future.

You say, you could not help remarking, that there was a very manifest difference between the look and appearance of the ordinary people in that part of Scotland through which you passed, and those of the same rank in England. Their countenances were not so open,—their gait and manner less hardy and unconcerned; you perceived more marks of politeness and complaisance, but, along with that, you thought you saw more care and anxiety of mind; so that you could not help feeling a kind of uneasiness at drawing the parallel between them that constantly obtruded itself upon your imagination.

Had you proceeded farther in your intended tour, you would have had much greater room for making this remark. For in many parts of Scotland, the lower class of people are so abject in their behaviour, so mean in their apparel, so dejected and melancholy in appearance, and so thin and emaciated in their looks, as cannot fail to excite very uneasy sensations in the mind of any one who has not been accustomed from his infancy to see them. This is the only disagreeable circumstance that you would probably have met with, had you proceeded in your intended circuit: but it would probably have made such an impression on you,

you, as would have greatly diminished the pleasure you might have received from other objects.

It is, perhaps, a misfortune, that those who have been accustomed from their infancy with this appearance of the poor people, do not perceive in it such a strong indication of wretchedness and misery, as it conveys to the mind of one who beholds it for the first time: for if it did so, they would be prompted to search out the cause of it, that they might thus be able to remove the effect. But so great is the force of custom, that it can render the most disagreeable objects indifferent, and those that naturally excite terror, and affright, altogether uninteresting. Long habit brings the soldier to walk unconcerned along the parapet, while the balls are whistling 'round his head, and his companions falling on every side; and those who are endowed with the most tender sensibility of mind, after they have lived some years in the West Indies, can with unconcern see their fellow-creatures treated with such severity, as would make even a brutish European shudder with horror. Is it therefore a wonder, that the slihter appearances of distress among ourselves should make but a faint impression on those to whom these appearances have been familiar from their earliest infancy!

It was not, you know, my fortune to be born in the part of the country where I now reside; nor was I early accustomed with such strong appearances of misery as have since been more familiar to me; so that at first the appearance of it struck me strongly, and affected me so much as to make me be very anxious, if possible, to discover the cause from whence it proceeded. And as my situation in life is such as necessarily leads me
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to be more intimately acquainted with the lower ranks of people, than usually falls to the lot of those who have had a liberal education, I have been thus enabled to become better acquainted than most people of that class,—with the internal œconomy of their families, and to perceive the numberless nameless hardships they have to struggle with ; which so powerfully tend to repress every active exertion of the mind, and to produce that sorrowful melancholy appearance for which they are so remarkable. But as people in high life have no access to know these circumstances, or to feel with what force a little, a very little rub, affects a mind already weakened by habitual disappointments, it is not surprising if they should often find occasion for blame, where I would only be disposed to pity ; and thus rather accumulate an additional load on the afflicted, instead of moderating the burden with which they are oppressed.

In these circumstances, without pretending to a greater share of humanity than others, I have been perhaps more affected with a sense of the hardships of their lot, than many of those with whom I have had occasion to converse, and have embraced every opportunity that offered, of undeceiving men of property and influence with regard to this particular ; — a thorough conviction of which would not tend less to their own advantage in the main, than to the prosperity and happiness of those whom it would affect in the first instance.

You see, my dear Sir, that your friend is possessed of a strong tendency to *Quixotism* : And although this country is perhaps as unfriendly to this disposition as most places, and the present æra as unfavourable for patriotism as any other ; yet I have been strongly tempted on several occasions to endeavour to extend my admonitions

admonitions a little beyond the bounds of the private sphere of my acquaintance. But being sensible, that a man who pretends to be actuated by any other principle than a regard to his own interest, is considered by all either as a knave or a fool, I have had the caution hitherto to keep myself from being exposed publicly in either of these points of view; although, from behind the curtain, I have ventured to publish a few essays on what I imagined interesting subjects; among which are several letters, under the signature of *Agricola*, upon the very subject of the queries contained in your letter, that made their appearance about a twelvemonth ago, in a miscellaneous pamphlet, published at Edinburgh, called the *Weekly Magazine*; which have been received, I am told, very favourably by the public.

I might refer you to these letters for my opinion relating to the present state of the Highlands of Scotland; but as they were hastily written, and are too much confined to the particular subject that gave rise to them; for the reasons already given I shall make my observations to you more general, so as to be applicable, not to one particular district of the country only, but to every corner where man may inhabit, or beasts be made to live; and not to those transient evils that may serve to amuse the speculative at a particular period, but to those radical defects, that, if not attended to, will continue to oppress mankind by incessant varying ills through all successive ages.

The discussion will be long; but if the subject be as interesting to you as it is to me, it will not appear tiresome: nor am I afraid that *you* will soon become weary of a disquisition that aims at promoting the happiness of thousands who are now struggling with want, and groaning under the load of accumulated afflictions. It
will

will perhaps be still more entertaining to you, that I shall have occasion to make observations on *your own* manufactures, particularly the woollen manufacture of England; which will be more intimately connected with the question here agitated than you may perhaps at present imagine.

As it is not to be supposed, that one who has been so much engaged in other pursuits as you have been, can have had time to enter very deeply into the minute detail of the interesting particulars that may affect the prosperity of agriculture, trade, and manufactures, I flatter myself, that many of the observations that may occur will at least have the merit of *novelty* to you. And indeed these subjects, in pamphlets, and other performances of that nature, that are daily issuing from the press, are in general so imperfectly treated, as tends greatly to mislead the judgement of such as are obliged to content themselves with the ideas that these afford.

I shall write to you with the freedom of a friend, and shall hope to be favoured with your remarks upon the several subjects treated of, with your usual candour and sincerity. For although you are no professed adept in these matters; yet the observations of a man of sense, on any subject that is not intended to be treated of in a mysterious way, as Aristotle of old boasted to his Royal Pupil he had done, are always of importance; — frequently more so than those of such as are engaged in the practice of the profession treated of; seeing these are very often biassed by their favour for their own calling, which prevents them from forming a proper idea of the importance of that when considered as a part of one political whole.

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In compliance with your request, I shall begin with an account of the present state of the Highlands of Scotland; from which I shall proceed to matters of more general importance.

It is a trite observation, but a just one, That man is not more naturally prone to attribute every unsuccessful event that befalls himself, to the influence of fortune, and unlucky chance, than he is to impute all the misfortunes of others to their own mismanagement; and to attribute nothing to that concurrence of fortuitous circumstances which frequently confounds the best-concerted schemes that can be formed by the wisdom of man. On this account, unhappy sufferers are too often reviled, and accused of faults of which they were not guilty, instead of meeting with that lenient sympathy which their situation ought naturally to excite.

Never, perhaps, could this observation have been more exactly verified, than at present with regard to our distressed brethren of the Highlands of Scotland; who, although involved in troubles that in a great measure take their rise from causes that few individuals among them could either have foreseen, or prevented if they had been apprehended, are, nevertheless, accused and reviled, as if they themselves were the sole and immediate procurers of all those misfortunes under which they labour.

And as every one is ready to shift the burden from himself, and put it upon those who may apparently be accused as accessories, the poor are unanimously disposed to attribute all their distresses to the rapacity of those of higher station; while these, with equal virulence, and perhaps justice, retort the charge upon the
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the indolent and helpless poor. Thus equally irritated against one another, they rack their invention to discover still more and more causes of complaint in those against whom they are so highly offended.

And as in all cases of this sort there will never be wanting many persons, who, although not materially interested themselves, eagerly take a side, and with inordinate warmth and virulence greatly caluminate the opposite party, these serve only to widen the breach that is already but too large, and to foment those dissensions that tend to divert the attention of all parties from the real and primary cause of all their misfortunes; which effectually prevents them from concurring together in concerting such plans as might in some measure alleviate their present distresses, and help to ward off those greater evils that seem to threaten them. It was with a view in some measure to effectuate this desirable end, that I was first induced to take up the pen on this subject, as I have already told you; hoping, that if I should succeed in proving, that a great part of the present distress of the Highlands arises from causes in which the present inhabitants, whether rich or poor, have but little share, it might serve in some measure to alleviate the virulence of party-dispute among them; and hoping also, that when they came to view each other as equal sufferers in one common calamity, each would be disposed to make the load as light to the other as possible, instead of mutually adding to it, as their present animosities, and mutual jealousy of one another, has a most powerful tendency to do.

It will be readily allowed, that every alteration that suddenly takes place in the old established customs of a country, can hardly fail to produce some sensible inconveniences in it, unless these

are guarded against with the most cautious circumspection. But in what country have we ever known a greater change produced, in so short a time, in its internal polity, or less care taken to guard against the inconveniencies that could hardly fail to arise from thence, than in the Highlands of Scotland?

Accustomed to an almost independent sovereignty, the chieftains, till of late, lived each in the midst of his own people, and shared with them the produce that his demesnes afforded. Ignorant of the luxuries that commerce had introduced into the other parts of the island, they lived contented with their own homely fare; nor seemed to have a wish, but to preserve that independency that had been transmitted to them by their forefathers, and to protect their family (for so they considered all their clan) from the depredations of others. This naturally produced a kind of warmth of attachment between the vassal and his chief, that is almost entirely unknown in every other stage in the progress of civil society, and is totally incompatible with that spirit of universal liberty that happily now takes place in the greatest part of this island. But can we imagine, that a principle, in which the chief glory of man was supposed to consist, and whose active exertions was thought to constitute his highest felicity, could be totally eradicated at once, by any means that could possibly be devised?—or that the minds of many, unhinged by the attempt, should not be thrown into a state of disorder that must be attended with the most serious and most disagreeable consequences?

By the unhappy disturbances that broke forth in this part of the island within the present century, many of their principal chieftains have been banished from their natives homes. And as the absence of him whom they considered as their only right-
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ful judge and lawgiver, relaxed the arm of justice for a time, a particular species of anarchy ensued, which gave rise to crimes, unheard of till then among themselves, and unknown in other parts of the world. When attempts were made to bring transgressors before another tribunal, the legality of which they did not acknowledge, and to punish them severely, for *crimes* which they scarcely deemed *trespases*, they were often screened by those of their own tribe; while others, who committed trespases against the local laws or customs of their clan, were equally protected by the civil power from undergoing the punishment they dreaded from their own superiors. In this manner the minds of the people became debauched. From the hope of impunity crimes increased; and in the contest for establishing the civil power, the temper of the inhabitants of these countries became soured, and their dispositions unsettled, so as to prevent them from steadily pursuing any occupation that might furnish them with the comfortable means of subsistence.

And as the government, for wise reasons, found it necessary to deprive the chieftains of that power and authority which they had formerly exercised over their vassals; many of these, who still remained in the country, finding their authority curtailed, and becoming gradually acquainted with the pleasures of a civilized life, grew less and less fond of that kind of life they had formerly been accustomed to, and came at last to relinquish it entirely. And having in time been led to follow other employments, that necessarily carried them from home, they were obliged to substitute others in their stead for the management of their estates; which laid the foundation of more uneasiness to their dependents.

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For as mankind usually submit with reluctance to any delegated authority, these high-minded vassals, who had been accustomed to look upon their chieftain alone as their superior, could hardly bring their minds to submit to the idea of being subjected to the controul of one whom they had hitherto viewed only as one of themselves, and whom they considered as intitled in equity to no superiority over them. His actions therefore came to be scanned with the most rigid criticism. The worst construction was put upon every thing he did or said; and every disagreeable change that took place with regard to them was attributed entirely to him. Mutual jealousies naturally produced asperities of conduct on both sides; and while the minds of the vassals, thus fanned to the highest degree, compared their past with their present situation, they sighed for the return of their natural lord; imagining, that with him would return those golden days of happiness and tranquillity that their fancy presented to them in such lively colours.

But when these civilized chieftains chanced to return to their native seats, who can describe the disappointment that their vassals often met with? For having, by their intercourse with strangers, acquired in time habits quite different from their forefathers, and modes of thinking in every respect dissimilar to them, their whole behaviour, and turn of conversation, was so totally different from what their dependents had fondly expected, as tended greatly to increase their chagrin, and served in many cases to turn their prejudices from the factor to the proprietor himself.

And as a man who has been accustomed to polished society, can find little to approve of, and much to blame, in the way of
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life followed by an uncivilized people; and as persons in the circumstances here supposed are not always so much upon their guard against discovering a contemptuous disregard for the persons or opinions of their inferiors, as *real* politeness might require, or extensive humanity exact,—they often, without a cause, gave deep wounds to the self-love of those whose misfortunes were their greatest crime. In this manner their affections became gradually alienated from one another; so that, instead of remaining mutual friends and protectors of each other, the chieftains and their vassals now view each other as declared foes; which heightens every evil, and makes every accidental distress come with redoubled vigour from what it would otherwise have done.

But although this must be exceedingly disagreeable, it is not the worst consequence that has accrued from this revolution in the country. For, as the proprietor formerly received his rents in kind, and spent his revenues among his vassals, with that liberal hospitality that in the most powerful manner tends to conciliate the good-will of those who share of it, little was carried away from amongst them, and they all partook of the produce of their own fields, which with difficulty was then sufficient to sustain them. But now these rents, however small, being constantly carried out of the country, help to drain it; not of its money, (for money they have none, except what is brought to them as the price of their cattle, almost the only produce of their fields), but of their provisions, that used to be applied towards the sustenance of the inhabitants. And as these inhabitants, now freed from the constant feuds and petty wars that used to carry off numbers of them, are increasing, while the quantity of provisions that used to sustain them is thus diminished, no wonder that they feel the pinching hand of want, and all those

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grievous ills that are its constant attendants, and take such methods to evade this fore distress as prudence or despair may first suggest.

It seems to be a very prevailing opinion in this country, that all the distresses so justly complained of by the poor Highlanders, have been occasioned by the merciless rapacity and avarice of the landholders. And I make no doubt but the injudicious severity of some of these may have hastened a little that calamity, which was still creeping forward by imperceptible degrees, and must inevitably have been felt sooner or later, without any blame on their part: for as the country which these poor people inhabit, is in a great measure incapable of being improved by culture, and as the inhabitants are unacquainted with the mode of doing it, if it were, it is plain, that if their numbers be increasing, while the quantity of food for sustaining them remains nearly the same, even supposing nothing at all were exacted by the proprietor, the time must quickly approach when famine will come among them of itself. It does not therefore appear, that the gentlemen are so much to blame for continuing to exact their rents, (which must be allowed by every one to be justly their due), or for wishing, that these should bear some sort of proportion to the general decrease in the value of money in every part of the island, as for not having in time endeavoured, by every gentle incitement that a prudent foresight could discover, to lead the poor people into such a train, as, without directly thwarting their deep-rooted prejudices, might have enabled them to provide for their own subsistence, and to pay, without distressing themselves, that acknowledgement which is so justly due to their superiors.

Neither ought the *gentlemen*, on the other hand, too harshly
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to complain of the indolence, and other bad qualities, they think they perceive in these poor people, or look for exertions from persons in their circumstances similar to what may be expected from others, whose minds have been accustomed to that animating fervour which a spirit of independence most naturally inspires, and whose bodies, from their earliest infancy, have been braced with that unabating vigour which active industry alone can produce. Habits, we all know, can only be overcome by slow, and almost imperceptible degrees; and even prejudices ought to be respected. We ought not therefore to expect, that any particular operation we wish to have performed can be done by these men, although we know that it could be executed by others not naturally endowed with greater powers than themselves; or accuse them of obstinacy, or wilful perverseness, if they fail in the execution of it: but rather, with a calm benevolence of mind, consider what it is that we require of them, and, with lenient circumspection, weigh well the means they have had to acquire the power of performing it with facility; always making due allowance for the obstructions that deep-rooted prejudices may have thrown in their way. We would surely laugh at the absurdity of that man who should require any of his servants to make a watch, and who should be offended at him if he could not execute it with neatness or accuracy; "because, says he, this machine is the work of a man who is endowed with no superior talents, and why should not you be able to perform what can so easily be done by another?"—Yet we are seldom offended at the equal absurdity of that man who expects that his servants, who are totally unacquainted with some other kind of manual labour that he may have seen practised by common rustics in some other part of the country, should perform it with ease, and who inveigh with virulence against them, accusing them of stupidity or obsti-

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nacy, because they cannot execute with accuracy and facility some of those rural labours that long habit has rendered easy and familiar to other persons, who are perhaps more dull of comprehension, and not less unreasonably attached to their own modes of practice than they are.

Could persons of all ranks be induced thus coolly to correct some of their own foibles, and make candid allowance for the almost unavoidable prejudices of others around them, it is not to be doubted but it would greatly alleviate many of their distresses, and totally remove a great deal of that unhappiness that at present embitters their life. Every good man must be sensible, that Heaven has endowed all ranks of people with talents nearly equal; and that these talents are often buried under a load of ignorance among the lower classes of people, so as never to appear. It therefore behoves those who have had the benefit of a liberal education, instead of imitating the vulgar in their illiberal prejudices, and adding insult and contumely to the other misfortunes of the poor, rather to commiserate their hard lot in life, and while they have a grateful sense of their own superior good fortune, endeavour to smooth those difficulties that lie in the way of the others, and, with a merciful forbearance, not be irritated at their absurdities or errors, but with kindness and lenity gently lead them from error to truth — from prejudice to right reason, and from misery to happiness. Thus would they show themselves truly worthy of that eminent station they enjoy, and prove in the most unequivocal manner that they are indeed exalted above the vulgar.

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N A T I O N A L I N D U S T R Y.

L E T T E R S E C O N D.

C O N T E N T S.

The introducing of manufactures into Scotland, particularly the Highlands, the only probable means of rendering the people easy in their circumstances.—Difficulties in establishing a manufacture there that works up foreign materials — exemplified in that of linen.—Other inconveniencies attending manufactures that depend on foreign materials — exemplified in the woollen manufactures of Venice — and the Netherlands.—Other inconveniencies that arise from the same cause — exemplified in the present state of Aberdeenshire.—Those manufactures are most beneficial that promote the progress of agriculture by drawing from the farmer the materials on which they depend — exemplified in the state of Aberdeenshire in the beginning of this century.—Individuals may reap profit by a manufacture or trade that is destructive to the community — necessary consequences that flow from thence.—Some manufactures that are supplied by foreign materials may, however, be of public benefit — exemplified in the silk-manufacture of England, the manufacture of ropes from hemp, and in the iron and steel manufactures.



OBSERVATIONS

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NATIONAL INDUSTRY.

LETTER SECOND.

To Mr ***** London.

DEAR SIR,

August 25. 1775.

I HOPE, from what I said in my last, you will be convinced, that as the Highlands of Scotland (and the same may be said of a very large proportion of Scotland in general) are altogether incapable of any high degree of culture, it must necessarily follow, that a considerable increased number of inhabitants cannot be supported there, nor any increase of revenue be drawn from thence, unless some method be devised for bringing money from other quarters

quarters into that country, with which the necessaries of life may be purchased. This can only be effected either by mines, manufactures, or fishings.

Of these three, the two last are the most universally beneficial to the people; particularly manufactures, the influence of which might be easily extended to almost every individual in the country. The most necessary study, therefore, of those who wish to improve that country, and render the inhabitants independent, and comfortable in their circumstances, ought to be, to discover what kind of manufacture could be most easily and quietly established among them, and then take every method that can be devised for promoting that manufacture.

It is an undertaking of some difficulty to establish a new manufacture of any sort in any country, as it is long before the inhabitants can be brought to perform the several operations with that dexterity and ease that is necessary for bringing it to perfection. But in a populous district, where the inhabitants are crowded together, so as to be more immediately under the inspection of those who may be brought to instruct them, these inconveniences will be far less sensibly felt, than in a region that is more thinly peopled, where they can hardly be ever brought together in any considerable number to receive instruction.

This inconvenience must always be in some measure felt; but the difficulty will be greatly increased, if the crude materials upon which the manufacturer is to operate, be not the produce of the country itself, but brought from a distance at a considerable expence. For no master-manufacturer would willingly entrust raw materials, of considerable value, with inexperienced operators at a
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great distance from himself; and he cannot here, as in a more populous district, give only a little at a time, so as to be no very great loser if it should not be altogether well done; but is under the necessity of giving out a good deal at once, otherwise the expence of carrying away the raw materials, and bringing back the manufactured goods, would become too high for him to be able to support.

On this account master-manufacturers are discouraged from settling in these lonely regions; and the inhabitants, even if they were willing to be instructed, are in a great measure deprived of the means of attaining the necessary degree of knowledge in these new arts.

This very circumstance must have always operated as a powerful bar to the establishment of the linen manufacture in the Highlands of Scotland; which we all know has been attempted with much keenness, and little success, for many years past. And it must always continue to be a powerful check upon every manufacture that is not employed on working up some of the native products of the country.

But if the materials were originally the produce of the country, the case would be widely different. For in that case the inhabitants could, at an inconsiderable expence, make small essays of their skill in manufacturing them. And as they would be always certain of receiving from the merchant a price for these manufactures proportioned to their intrinsic value, they would be encouraged to go on in their attempts, and to exert their utmost abilities to make their goods still more valuable than at first, so as

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to arrive imperceptibly at as great a perfection in these manufactures as the nature of their materials would admit of.

But this is only one of the many important advantages that result to a country when it is employed in manufacturing its own native products, in comparison of what it would reap by carrying on the same sort of manufacture were the crude materials imported from abroad.

For when the manufacturer depends upon any foreign state for the materials upon which he is to work, he is in a great measure in the power of that foreign state; which, upon any cause of disgust, by stopping the exportation of these materials, may lay the artists entirely idle, and thus reduce them to beggary and ruin; to the endangering the internal peace and happiness of the whole community. Those who want to see the influence that this must have upon the councils of a nation, may get ample satisfaction by glancing over the history of the Netherlands while under the government of the Dukes of Burgundy, when their woollen manufacture was at its greatest height; as they will plainly perceive that Britain, which was then far inferior to that country in power or riches, kept it in continual awe; as it depended on this country for a great part of the wool that kept its manufacturers employed.

But, independent of this circumstance, it must always happen, that in proportion to the degree that a manufacture in these circumstances flourishes, the demand for the raw materials will increase; and as the demand increases, the venders, perceiving the necessity that the manufacturers are under of obtaining them, will certainly enhance the price; as has plainly been
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the case of late with regard to our own linen manufacture; the Dutch having gradually raised the price of their flax as our demand for it increased, so that it is now about a hundred per cent. dearer than it was twenty or thirty years ago, when that manufacture was but in its infancy.

But even if this policy should not be practised, where the materials are at all bulky, the expence of freight, commission, duties, carriage, and other necessary charges that must attend the bringing these materials from a distance, become so high as to put it out of the power of the distant manufacturers to bear a competition in foreign markets with those who may procure the raw materials nearer home, and at a much lower rate. So that the success of any manufacture in these circumstances depends entirely on the stupidity or indolence of the nation which produces the materials: A very precarious footing for the happiness and prosperity of a whole people.

Accordingly we find that Venice, and the other Italian states, which, after her example, first began to perceive the benefits of industry and commerce, were enabled to carry on the woollen manufacture with great profit so long as the rest of Europe remained ignorant and uncivilized. But as soon as they began to open their eyes, and to manufacture their own materials, the Italian manufactures began to decline, and are now dwindled into little consideration in comparison of their former splendor.

It was the Flemings who first perceived the advantage that their situation gave them over the Italians for the trade of the northern parts of Europe, and so became their rivals; who, altho' without wool of their own, found themselves enabled, by their

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nearness to those countries that produced it in abundance, to beat the Italians out of their former markets. But when England began to prosecute her woollen manufacture with spirit, the Flemings themselves were not able to bear a competition with her, and thus they gradually lost that manufacture for which they were once so universally renowned.

That this is the real cause of the fall of the woollen manufacture in the Netherlands, and not the oppression they suffered under the Spanish yoke, as is too generally imagined, is sufficiently plain from the revival of the linen manufacture there; which, by consuming flax, the native produce of the country, has been enabled to rear up its head again, and bear a competition with every other country in Europe, while the woollen manufacture sunk to rise no more.

These are inconveniencies that must in all cases attend such manufactures as depend upon foreigners for the rude materials: but in some particular cases there are other evils that attend it of a still more serious nature than those already enumerated.

If the manufacture is of such a nature as to admit of being carried on in separate detached houses in the country, and may be practised by any single person independent of others, it must invariably happen, that the whole of the money that is paid for the working up these foreign materials flows directly into the hands of the lower ranks of people, often into those of young women and children; who becoming giddy and vain, usually lay out the greatest part of the money that is thus gained, in buying fine cloaths, and other gaudy gewgaws that catch their idle fancies. And as these are almost always the produce of other countries, the
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greatest part of this money flows out of the country again, by innumerable channels, almost as quickly as it arrives. So that the benefit that results to the community is in this case far from being so considerable as a superficial observer would at first sight imagine it would be.

Were this, however, the greatest inconvenience, it might still be allowed of as evidently beneficial to the state; but there are other consequences that necessarily attend manufactures of this sort, that render it in some measure doubtful if they may not, in some cases, be rather hurtful than beneficial to a country.

For as the money in this instance flows directly out of the country, without including the *farmer* in the line of its circulation, *he* can reap no obvious benefit from the manufacture. And as the lower ranks of people then get more money than formerly, and affect a much greater degree of finery than before, the farmer will naturally wish to vie with these, and endeavour to preserve the same importance among them as formerly; so that *he* also will necessarily be induced to affect more finery and extravagance than before. And as he has no increased revenue to support this, he must of necessity become poorer, and more straitened in his circumstances, than formerly: A misfortune that can never be too much guarded against in a well-ordered state.— But this is not his greatest misfortune.

As the lower classes of people, in these circumstances, find they can earn money by a kind of labour that is less severe than the operations of agriculture, they naturally desert that mode of living, and apply to the other; so that the farmer in a short time finds himself at a loss for servants to carry on his necessary opera-

tions. He is therefore compelled to advance their wages considerably; which is one other cause of his becoming poorer and more miserable still. And as he thus declines in his circumstances, his servants become more insolent and less active, which quickly tend to hurry him into the most abject poverty and despair.

Still, however, one way, and only one, remains, by which he may for a time keep himself from sinking into absolute ruin, which he is, on this account, compelled to adopt. He must try to share some of the profits of the manufactures with those who earn the money for them. And as all mankind are fond of a sort of independent settlement, where they can remain in some measure their own masters, he *lets* to these lower kind of people a small part of his farm, at a considerably advanced rent; which they are induced to accept of, in the hopes of being able to pay it in some measure by the profits that they obtain by the manufacture. This rent they are perhaps enabled with difficulty to pay so long as the manufacture continues to flourish; but as they are incapable of improving the soil, and have their hearts totally alienated from the laborious drudgery that this would require, the first check that the manufacture meets with, fails not to involve them in the most poignant misery and distress.

In this state things will remain for some time, and the original tacksmen be thus enabled to live perhaps nearly as well as he did formerly, although at the expence of a total stagnation of all sorts of rural improvements. But when his lease falls, the proprietor, or his factor, (steward), finding that his *subtenants* have paid almost the whole of his rent, chuses to take these small tenants immediately under his own management; and, by dividing what remained

remained in the possession of the original tacksmen into such small parts as he can let to these poor people, he frequently finds himself enabled thus greatly to advance his rents; which he is naturally enough disposed to look upon as a real and essential improvement of the country.

In this manner it necessarily happens, that the whole order of rich and substantial tenants is totally annihilated, and all the country becomes parceled out into small and trifling possessions, which do not deserve the appellation of farms.—Some speculative theorists will likewise imagine, that this is another real and essential improvement of the country.

But mark, I beseech ye, what are the natural consequences that result from this arrangement.

In the first place, it necessarily follows, that as each of these small tenants is poor, and has too little ground to be capable of maintaining a sufficient stock of beasts to labour it properly, the ground is less perfectly ploughed than formerly, so that it produces less abundant crops than it always used to do.

A second consequence that in some measure results from the first is, that by producing less abundant crops, the country is not capable of maintaining during the winter so many beasts as formerly; so that less dung, for again recruiting the exhausted soil, is made than used to be; which has a direct tendency to make the crops still more scanty than usual, and thus in a twofold manner hurts the interests of the community.

A third consequence that results from this arrangement is,
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that the small tenants, finding it impossible in many cases to consume the produce of their possessions by that kind of live stock that would be most advantageous to them, because of the expence of keeping servants to look after such a variety of different kinds of stock; these kinds of animals must be entirely abandoned as unprofitable, and the possessor of the ground must lose all the benefits that formerly were drawn from them.

Thus, supposing the original farm could have maintained, along with other live stock, a flock of two hundred sheep, the profits arising from these would have been sufficient to defray the expence of a shepherd to attend them; when this farm comes to be divided into ten or twelve small lots, each of these lots could only maintain fifteen or twenty sheep, which could not on any account defray the expence of a keeper; so that the little farmer is on this account obliged to renounce his sheep entirely, and give up all the profits that attended them. And as these sheep produced a considerable quantity of valuable dung, it tended much to meliorate the soil, and make the farm yield every year more luxuriant crops than it is possible for any art to make it produce without this powerful assistant.

A fourth consequence, which likewise takes its rise from the former, is, that as many baneful plants that would have been cropped by the sheep, are now suffered to run to seed, and establish themselves firmly in the soil, which cannot be ploughed up with profit, on account of the want of manures, arising from the causes above specified, many fields are necessarily allowed to run wild, and become covered with heath and other useless weeds, which were, or would have been, good corn or pasture fields, under a better and more skilful management.

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Thus it appears sufficiently obvious, that in consequence of this unskilful arrangement, almost every circumstance tends to make the soil gradually produce less and less than before, and therefore keeps the possessors of it poor and miserable. And although they may be able to struggle for some time against these accumulated evils; yet as they gradually come to press more and more heavily, the poor people in time become nerveless and dispirited to a degree that is scarce to be conceived. Not a stone is by them removed from a field, should it be ever such an impediment to every rural operation;—not a drain is opened to carry off the superfluous moisture, should that water be ever so pernicious to the soil;—not an ounce of any sort of manure is purchased,—not an inch of ground inclosed; and every sort of improvement is entirely at a stand where-ever this mistaken policy has prevailed.

And what adds still more to the distress of the poor dejected persons called *farmers*, in these circumstances, is, that as their children are soon able to earn something for themselves, they in a short time flee from the sorrowful abode of their parents, and desert them in their old age, leaving them to struggle the best way they can with poverty and distress; while these giddy young people make haste to get a family and farm before they have any stock, and quickly experience the same misery in their own house that they could so ill put up with in that of their parents.

Such, my dear Sir, are the natural consequences of introducing a manufacture that admits of being carried on by separate and detached persons in the country, when it is employed in working up materials that are not produced in that country. The account is so melancholy, and the conclusions that must be drawn from it are so different from the ideas that we are usually taught

taught to entertain, that I shall not be much surpris'd if you look upon it at first rather as a fancy-piece, than as an exact picture drawn from a subject that actually exists at present.—In this respect, however, you will be mistaken: for I can assure you, in sober sadness, that the county of Aberdeen in Scotland is precisely in the state above described at this very moment: A county as renowned for its flourishing manufactures, as for the great rise of rent that has accrued to many gentlemen of property in it, in consequence of such a plan as I have described above. And however much this account may surprise some who look no farther than to the surface of things; yet I am fully convinced, that no one who is acquainted with the internal state of that county, will say I have in the least exaggerated any one circumstance. And if so, I leave every one to judge of the benefits that have accrued *in the main* to that county, from the manufacture of stockings, that has been carried on in it to a very great extent for upwards of thirty years past, entirely with foreign materials.

Agriculture is allowed on all hands to form the most solid basis for the riches and prosperity of any state; and manufactures, as contributing to that end, when properly conducted, are highly beneficial. But when, from inattention, or want of knowledge, they are so improperly conducted as to retard the progress of this most useful of all arts, the apparent prosperity which they for a time produce, may justly be compared to the glowing lustre of a brilliant meteor, that for a time delights the fancy with the most agreeable ideas,—but when it disappears, leaves nothing but darkness and gloomy desolation behind.

Aberdeenshire was in a very different situation towards the latter end of the last, and beginning of the present century. For

at that time a considerable manufacture was carried on in that county of worsted stuffs called *fingrams*, *serges*, and *prunelloes*, &c. all made of wool the produce of their own flocks; which being bought from the farmer, and manufactured by the lower ranks of people, gave to each of them their proper share of the profits. The farmer was then a person of some consequence.—Servants were to be had in abundance;—his flocks and herds were numerous,—his crops luxuriant,—himself content and happy, and his *laird* sure of his rent; while decent frugality prevailed among all ranks of people. Improvements in agriculture were beginning, and would have made considerable progress among the farmers long ago, had it not been for the circumstances above enumerated. But now, pinching poverty appears in every countenance, while taudry finery and ostentatious extravagance is seen in every corner. Credit for a short time is purchased at the enormous rate of thirty or forty per cent. of advance on the price of what is bought: and thousands of acres are now overgrown with heath where waving harvests have formerly flourished.

Think not, however, I mean to insinuate, that no profits are made by the present manufactures and commerce of that place. It is not to be doubted but many individuals have made very genteel fortunes by both of these vocations. The master-manufacturer, and the importer of foreign commodities, have each a *certain* profit, and grow rich by that traffic; while the country in consequence of the total stop that is put to improvement in agriculture may be said to be a loser*. And the country-gentlemen, however

* It would be of much importance to the state, if country-gentlemen, and the legislature at large, would learn to distinguish with precision between those kinds of commerce and manufactures that tend only to enrich the merchant, and those that at

however little some of them may at present see it, must in the end become very great sufferers ;— as a little time, if the above induction of facts should not be satisfactory, will sufficiently show. —While things remain upon their present footing, gentlemen, with little pleasure, and less profit, may force a few unavailing improvements a little forward ;— but it never can be in the power of the mere farmer to do any thing of consequence in that way ; so that the general improvement of the country must be at a stand.

But unstable is the prosperity of that country, which has its chief dependence on the flourishing of its towns independent of its agriculture and peasantry : for a thousand circumstances may totally

the same time tend to enrich the country, and augment its internal prosperity : for these are often disjoined ;— so often, indeed, that those kinds of traffic which are in general most profitable to the merchant, are least beneficial to the country.—The merchant is never so happy, or so likely to acquire riches in a very short time, as when he obtains any monopoly in trade ; but every monopoly in trade tends to impoverish the industrious subjects of the state.—The importer of foreign fineries finds it greatly for his own profit to encourage a spirit of dissipation and extravagance among all ranks of people : for he not only reaps profit on them in the mean time, but he knows, that what were accounted mere superfluities at first, soon become necessities of life, so that his trade will increase with the increasing demand for them.—It is his interest, therefore, and will be his study, to promote as far as he can that general spirit of extravagance and dissipation, which is the most effectual bar to sober industry, and the most certain means of destroying the internal felicity of every individual of the state.—In consequence of this system, the people soon become poor, and the profits of the dealer increase with their poverty.—Like rich usurers who meet with needy spendthrifts, they advance what is desired at an extravagant premium.—Credit is given for an exorbitant advance of price.—This may be called the harvest of the moneyed trafficker ; which is the more abundant, the less there is to give.—His profits therefore increase, as the misery of the country increases.—How absurd then is it in mankind to estimate the degree of the improvement of a country by the richness of its merchants ?

totally ruin the one, while the prosperity that results from the other can hardly be affected but by the total destruction of the state itself.—Such was the case with Genoa, that once proud mistress of the seas, which is long ago sunk into total insignificance. —Such was Antwerp, which but two centuries ago raised her towering head aloft, and looked down with contempt on all the other places of the earth. Antwerp, whose merchants were princes *, whose manufacturers were reckoned among the honourable

merchants ? It usually happens, that when a state is exhausted to the utmost degree, and on the very verge of destruction, its merchants are in the highest degree of splendor ; as might be illustrated by many examples, ancient and modern, were it here necessary.

Too long hath the legislature of this country omitted to make this necessary distinction, which has led them into many errors that it is now high time for them to correct.—It is the interest of men of landed property to watch over the real prosperity of the labouring people, and to increase their real riches ; for their own revenues must rise or fall with them.—The present time is all that a merchant needs to attend to.—When the poor are so far fleeced as not to be able to yield him any more of their substance, he can, without inconvenience, withdraw to another region, and carry off his plunder with him.—It is therefore highly impolitic to allow the councils of a nation to be guided entirely by a set of men whose real interest is not necessarily connected with the prosperity of the state.—Commerce ought to be encouraged as a useful handmaid of the state :— as a very valuable servant it is true, but still but as a servant ; whose interests ought to be made subservient to that of the state, and not like those cunning factors of some opulent companies, who make the interest of their constituents give way to their own private advantage.

* Lewis Guicciardin gives the following account of one of the merchants of Antwerp : “ Li piu ricci & i piu nominati di tutti questi mercatanti, sono i Foccheri, Alamani d’Augusta, il capo della cui famiglia, cio e’ il Signor’ Antonio, Principe veramente de gl’altri mercatanti, essendo morto poco fa, pur’nella sua patria, lasciò per testamento il valore de piu di *sei milioni di scudi d’oro*, oltre a tante altre grossissime facultà, che sono in quella illustre, & splendida famiglia,

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nourable of the earth, by a trifling revolution was totally abased, and never has been able to recover almost any resemblance of her former prosperity. And in Scotland the royal boroughs of Fife, which once flourished exceedingly by means of peculiar privileges, fishings, and trade, altogether independent of agriculture, that are long since removed to other shores ;— are they not sunk into the lowest insignificancies ? And ought not this to afford us a striking lesson of the instability of any grandeur that does not ultimately depend on agriculture for its support ?

But although the profits that result to a state are always much greater, if its manufactures are supported by the produce of the state itself, than where the materials are brought from another country, yet they are hardly in any case so pernicious as in that which I have mentioned.

For if the manufacture necessarily requires to be carried on by people in concert with one another, if I may use this expression ; that is, where those who practise the different branches of it, stand in need of the assistance of each other, so that it must be carried on with a number in one place, it will rather have a tendency to promote than retard the progress of agriculture.

If the manufacture necessarily requires the aid of machinery in

“ guadagnate nell’ esercizio mercantile in termine di circa settanta anni *Discrip de Paix Bassi*, p. 116.” We are apt to believe, in Britain, that no merchants ever equalled in opulence the merchants of London ;— but I believe there is no instance of one so rich as this Signor Antonio Focheri, who bequeathed at his death, not to mention his other property, six millions of scudi, which, at 3 s. 9 d. each, amounts to L. 1,120,500 Sterling. What a noble idea does this give of the magnificence of this trading city at that time !

a great degree, or stands in need of shelter for the operators, so as to require extensive buildings to be erected before it can be properly carried on;

Or if those who practise it must necessarily serve an apprenticeship before they can attain a proper knowledge in their calling,—the establishing of such manufactures in any country may be considered as beneficial to the interest of agriculture, and therefore tend to the good of the state.

For if a manufacture of any of the three classes above enumerated be established in any rich and fertile country, by convening a number of people into one place, who must all be fed by the farmer, without interfering with any of his necessary operations, they establish a ready market for the produce of his farm; and thus throw money into his hands, and give spirit and energy to his culture. While his servants, unseduced by the manufacturers, who are at some distance from him, or separated by barriers that are not overcome without some considerable effort, continue to perform their labour with alacrity, and share with their master in his reasonable profits; and thus, with pleasure and satisfaction to themselves, enable him to obtain still more money, and carry on still higher degrees of improvement.

It is in this manner that the silk-manufacture in England, although carried on entirely with foreign materials, must be considered as highly beneficial to the state, although much less so than if we ourselves, or our colonies, could furnish these materials.

The manufacture of ropes from hemp, that is carried on in so many

many different parts of the island, will furnish us with an example of the second class of beneficial manufactures, although employed in working up foreign materials.

And every manufacture of iron or steel throughout the island, affords us an example of the third class of manufactures, that may be carried on with great benefit to the state, even where they are obliged to have recourse to foreign markets for their rough materials.

I am afraid you may think these discussions rather tedious than entertaining; but they are undoubtedly of great importance; on which account I hope they will meet with a favourable indulgence from you.—Many persons in England do not make a careful enough discrimination in this respect, when they are about to establish new manufactures in any place;—but in Scotland you will hardly meet with one among the middling ranks of people, who do not imagine, that all sorts of manufactures are almost equally beneficial to the state; nor have they any other rule of estimating the comparative utility of different sorts, but by the proportional value of the manufactures worked off in a given time. It is evident, however, that this is by no means a just mode of calculating; and therefore it became extremely necessary in a disquisition of the nature I have undertaken, to examine this matter thoroughly; because, if it shall be found necessary to adopt any sort of manufactures, it becomes expedient to be certain if the particular manufacture to be so recommended, will be attended with very beneficial consequences to the state, or the reverse.

Let this be my excuse for having detained you so long upon this preliminary discussion.—I am, &c.

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O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R T H I R D.

C O N T E N T S.

Ineffectual efforts to rear abundance of flax in Scotland.—The ruinous consequences that attend the cultivating flax in a poor country.—The growing of wool in similar circumstances highly beneficial.—The richness of the soil in England much owing to this cause.—Reasons why sheep have been less attended to in Scotland than in England.—Bad effects that have resulted from the attachment of the Scots to black cattle instead of sheep.—The general indolence of the people in the Highlands in a great measure owing to this cause.—It necessarily tends to involve the poor in misery and distress.—It is the chief cause of their present difficulties.—Possibility of still rendering that country flourishing and happy.



OBSERVATIONS

ON

NATIONAL INDUSTRY.

LETTER THIRD.

To Mr ***** London.

DEAR SIR,

September 5. 1775.

BRITAIN has never been thought capable of furnishing materials for carrying on any manufacture to such extent as those of linen and woollen: the last of which has been long firmly established in England; and for some years past vigorous efforts have been made to establish the former in Scotland, although hitherto with less success than many sincere well-wishers to their country would be pleased with.

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Hitherto the linen manufacture in Scotland has laboured under the great inconvenience of being obliged to depend on Holland, and other foreign states, for the principal part of the flax that has been manufactured here; and has felt those rubs that may naturally be expected in these circumstances, from a commercial people, who in general know their own interest as well as any one, and pursue it with unwearied application; so that the rough materials have been from time to time raised in their price, till they are now about *cent. per cent.* dearer than when the manufacture was first established in Scotland, as I have already had occasion to remark.

But although the encouragers of this manufacture seem to have been fully sensible of the absolute necessity of our rearing the raw materials ourselves, if we wish to continue it, and have therefore spared no pains or cost to encourage the growth of flax in this country; yet they have never been able to attain the desired end. And there is reason to fear that the manufacture is on this account but in a very declining state at present.

If we would take a cursory view of this island, and compare the nature of the soil and other particulars in each of the two grand divisions of it, we should at first sight be ready to imagine, that the inhabitants of each of these districts had resolved to adopt the manufacture that most naturally suited the other. At least this is remarkably the case with Scotland, which has undoubtedly made choice of a manufacture for herself, that might have been carried on to much better account in England.

For as flax is an impoverishing crop, taking a good deal of nourishment from the soil, and yields nothing in return by which it
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might in any degree be again recruited, it is evident that this crop could only be cultivated with propriety in a rich and fertile country. And as the soil of England is allowed to be richer and more fertile than that of Scotland in general, it seems that England would have been better adapted for rearing flax, and of course for carrying on the linen manufacture, than Scotland.

On the other hand, the numerous mountains in Scotland, so exceedingly proper for rearing sheep, and the many rills that descend from these, so well adapted to many of the operations of the woollen manufacture, would seem to indicate, that this country was more naturally fitted for carrying on that manufacture than England, which is much more deficient in both these respects.—But,

Not to prosecute this parallel farther at present, it may be observed, that if even the most fertile fields in Scotland could not, without evident loss to the public, be made to rear extensive and continued crops of flax; how much more pernicious would it be to the poorer and more barren countries that border upon or are included in the Highlands, which, with no degree of culture that has hitherto been devised for them, have been rendered capable of producing abundant crops of grass or corn!

In these situations, should this ruinous crop be ever introduced, the best soils would hardly be sufficient to rear it to any degree of perfection. And as all these rich spots would soon be exhausted, the soil would in a short time be so much deteriorated as to become not only unfit for bearing flax, but even for rearing corn of any sort to perfection.

On this account, it is undoubtedly the interest of every gentleman who is possessed of lands that stand in need of melioration, to guard with the utmost care against introducing this crop into his fields. For, however great the profits might be that should attend the first two or three crops of it, the inevitable consequence would be ruin to his estate in the end. Like a slow but subtle poison, that may be pleasing to the palate, although destructive to the human frame, he ought to dread its venom while he tastes the sweet, and guard against its baneful influence with the most cautious circumspection.

Luckily, however, for the gentlemen of property in the Highlands, and other districts that would be in greatest danger of being hurt by it, the difficulties attending the culture of this plant in their particular situation, are so great and unsurmountable, that they run little risk of suffering very deeply in this way: although I am well informed, that some of the most extensive flax-raising counties begin to feel these effects of the culture of this plant in a very sensible degree, and are therefore obliged to retrench very much in this respect; insomuch that in some of these *, not one fourth part of the flax-seed is now sown that used to be a few years ago.

For these reasons, with others that need not be here adduced, it is in vain to expect that ever abundance of flax can be reared in the Highlands, or even Lowlands, of Scotland, to supply materials for an extensive linen manufacture.

The same objection, however, does not lie against the rearing of wool. For should the country be found to be well adapted for

* Particularly Perthshire.

the nourishing and rearing sheep to perfection in other respects, considered in this point of view it would perhaps be the most advantageous produce that could be obtained from the soil, as we know of no more speedy and effectual method of meliorating a poor and barren soil, than depasturing it with sheep.

For the dung of this little animal is justly esteemed a more fertilising manure, than that of any other domestic animal; so that if they are penned (folded) on proper places in the neighbourhood of their pasture-ground, these spots will be so much enriched, as to be capable of producing abundant crops of grain. And if these spots are laid down to grass again before they are too much exhausted, they will continue ever afterwards to carry a great deal more grass than formerly. This would render the same fields capable of nourishing an additional number of sheep, or other animals; which would yield a proportionally greater quantity of dung, that would serve to meliorate still more ground; and so on it might go forward, constantly improving the soil more and more *in infinitum*.

Nor are the advantages of this improvement confined to arable land alone, but may be experienced in the same degree in mountainous countries that do not admit of tillage at all. For the ground thus manured, however steep or rugged it may be, will continue ever afterwards to yield a much greater quantity of richer grass, than it ever could have produced without this powerful *stimulus*. So that in this case the same consequences follow as above.

Doubtless this circumstance, although not attended to by political writers, has contributed not a little to the fertility of the soil
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in England; and is perhaps one of the principal causes of its superiority in this respect over Scotland. For since the earliest accounts of that country, we find that sheep have always been held in high estimation in it. And from the days of Edward III. till the restoration, the profits the farmers must necessarily have drawn from this animal having been evidently greater, than from any other product of the fields, they must have always been reared in prodigious numbers. And any one who attends to the necessary melioration of the soil, where great flocks of sheep are kept, and little arable ground, will not be surpris'd if in many hundred years that should become eminently conspicuous.

From these considerations it would seem to be an object well worth the serious attention of every proprietor in Scotland, to examine with the most scrupulous accuracy, if wool of a good quality could be reared in abundance in this country, so as to furnish materials for an extensive manufacture; that thus we might be enabled in time to reap some of the advantages that necessarily result from the abundance of our flocks of sheep.

It seems at first sight to be a little surpris'ing, that in such an extensive tract of country, that seems to be so capable of rearing sheep in abundance, as is the Highlands of Scotland, this animal should have been so long neglected. But the power of habit is such as is not easily overcome; so that those who have been long accustomed to follow a certain routine, go on in it with a sort of blind perseverance, without ever taking the trouble to examine if the practice they follow be more beneficial than others equally within their power.

This has probably been the case with the inhabitants of the
Highlands.

Highlands. For when feudal anarchy took place in these regions, — when robbery was practised as a trade, and sudden inroads from the neighbouring clans were always to be dreaded, — cattle, as being easier defended, or driven to places of safety, than sheep, would naturally become the favourite stock of these people; especially as they could have no temptation to wish to have more wool than was merely sufficient for their own clothing, such as it might be. For as commerce could not be there practised, no idea of manufactures for foreign export could ever enter into their imagination. A great quantity of wool, therefore, must have been to them only an unnecessary and useless burden. — But the hides of their cattle afforded them shoes, bucklers, thongs, and many other articles which must have been useful to a savage people, and thus highly esteemed by them.

In this manner they have acquired originally a fondness for that kind of live stock. Nor have they as yet become sufficiently acquainted with the advantages of a civilized life, to be able to perceive what a difference it produces in the value of articles of this sort.

Industry, and activity of body and mind, are the qualities that contribute in the highest degree to the happiness of every civilized nation: those circumstances, therefore, which tend to promote these in the highest degree, ought to be attended to with the greatest care.

If a grazing-country has its chief dependence upon cattle, it is attended with this peculiar inconvenience, that as the inhabitants have no necessary inducement to industry, they naturally abandon

don themselves to idleness. And a habit of indolence being once acquired, it must be extremely difficult to get it eradicated.

But if the inhabitants have their chief reliance on sheep, the necessary operations of shearing and cleaning the wool, &c. oblige them to be in some measure more active than they otherwise would have been. And as they would have constantly among their hands materials so necessary for their own and families clothing, they could hardly avoid falling into the way of manufacturing it in some sort; which would have a powerful tendency to prevent that listless indolence from getting footing among them that must prevail among the other species of graziers.

Considered, therefore, in this light, it would seem probable, that a grazing-country, that has its chief dependence on sheep, is much nearer a state of improvement than one that depends upon cattle.

Another very considerable inconvenience that attends a cattle-raising country is, That as there can be no constant market for these in the country itself; and as the inhabitants, in these circumstances, would have no other marketable commodity, they must depend entirely upon others for almost the whole of their subsistence; so that when, by any accident, the demand from abroad is lessened, the value of their cattle sinks prodigiously; and in some cases they cannot be sold at all. But as the inhabitants are even then under a necessity of having some bread-corn, and other necessaries of life, (not to mention their rent), they must in these cases be reduced to a state of extreme misery, which not only debilitates

bilitates the body, but also enervates the mind, and renders the whole people incapable of any generous exertion*.

But what renders this still more to be lamented is, that almost the whole calamity in these cases falls upon the lower class of people, who thus become little better than slaves, subjected in all cases to the capricious nod of a set of men who keep them in the most abject thralldom: for, as the cattle must all be driven to a distant market, and sold in considerable parcels together, it becomes impossible for a poor man to carry his own little stock thither himself. The poorer sort of people are therefore subjected to the necessity of dealing with a set of men called *drovers*, who, on account of the difficulty of travelling in that country, which prevents access to strangers, have in some measure an entire monopoly of the sale of cattle, and therefore give almost what prices they please; and thus in a short time amass more wealth, and live in greater splendour, than many of the ancient chieftains themselves can do. And as these drovers are usually considerable graziers themselves, when at any time the demand for cattle slackens a little, it is but natural to suppose, that they will then sell only their own; so that every other person is then reduced to the most pinching want.

Hard, indeed, must be the lot of those who are subjected to such a complication of distresses, as the situation of these poor people must necessarily expose them to!

* Were it necessary here, it would be no difficult matter to shew, that an accidental stagnation of this sort, coinciding with a failure of crop in the low countries, was the *immediate* cause of the distress that gave rise to the thoughts of emigration, and the present complaints in the Highlands.

But if the country were in a great measure stocked with sheep, some part of these distresses would be immediately removed: and, with a little necessary attention in the proprietors of that country, the whole might in a short time be remedied; for as they would then have not only the carcase to bring to market, but the wool also, they would have at least two chances to escape a bad market for one they have at present.

And if they should be induced to fall into the way of manufacturing their own wool, (which would not be difficult to accomplish if once they had the materials in abundance), money would come among them in plenty;—emigrations of all sorts would quickly cease;—the number of people would encrease;—a spirit of independence would prevail, and entirely abolish that shocking disparity of condition, which at present annihilates (if I may use the expression) their souls, and enervates their bodies.—Their mental faculties would gradually acquire strength, and a spirit of enterprise and emulation get footing among them; which would enable them to perceive, and improve to the utmost, all the advantages that their situation afforded them;—advantages which, in certain respects, few can equal.

Some may perhaps deem it impossible ever to effectuate a change so desirable; and therefore, with a desponding indifference, think that every proposal to effectuate this change is chimerical. But I cannot bring myself to view it in this light. Experience may easily convince us, that no two men differ more widely from one another, than the same person may do from himself in different circumstances. Like a spark of fire concealed under a heap of rubbish, the human mind may long be buried under the overpowering load of ignorance and oppression; but
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free it from these chains, and it will quickly develop its powers. Feeble, indeed, are its first exertions, and easily repressed; but if these are encouraged, it gradually waxes stronger and stronger, till at length it blazes forth with irresistible power and glory. It is thus that South Britain, that once poor despised country,—the prey of every invading power, and slave of many successive conquerors, has at length become the envy or the dread of all the nations around it. Nor will the same means fail of producing similar effects in every other country. We have seen, that a small spot of this peculiarly-favoured isle is unfortunately involved in circumstances which render the inhabitants less comfortable than those of other parts of Great Britain. But the æra seems to approach, when they will partake of the same blessings as the other parts of the island. Almost all the disagreeable part of the change is already effected.—The anarchy that arose from the loss of their chieftains, is now in a great measure ceased, by the establishment of the civil power, which has now got such firm footing among them as totally to abolish all marks of their former jurisdiction.—The old men, who were unreasonably wedded to their former customs, are now almost the whole of them dead; and with them a great part of their ancient prejudices have disappeared.—The late wars carried many of the common people abroad, who have acquired some knowledge of the advantages of civil society; and the idea they have given of the blessings of liberty, and the spirit of independence that they have disseminated among their fellows, has, no doubt, contributed to excite that desire of emigrating which at present prevails among them. Even this spirit for emigration I consider as one of the most favourable symptoms of their being ready to adopt any rational plan of improvement, as it proves, that their own customs and country are in some measure indifferent to them; and that they are sensible

of the difagreeablenefs of their fituation, and would willingly exert themfelves to render it more comfortable. It is the crisis of the difeafe which has long haraffed them. If nothing is now done to reftore their exhausted ftrength, the confequences may be fatal; but if they are duly cared for, and have proper cordials adminiftered to them, they will quickly attain that health and vigour of which they have been fo long deprived.

Firmly convinced of thefe facts, I fhall proceed in my next candidly to inquire, whether it feems to be probable, that wool of a good quality may be raifed in that part of the country, to give any reasonable room to hope, that an extenfive woollen manufacture may be eftablifhed in Scotland; which will give me an opportunity of remarking many particulars with regard to the raifing of wool, and management of fheep, that feem to have been hitherto but too little attended to.——Yours, &c.

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N A T I O N A L I N D U S T R Y.

L E T T E R F O U R T H.

C O N T E N T S.

Objections to some of the foregoing remarks.—Manufactures of fine laces, and other articles of luxury, in which the materials are of little value, supposed to be beneficial to a state, exemplified in the bone-lace manufacture in Buckinghamshire and Paisly.—Answers,—showing that these deserve not to be highly encouraged,—exemplified in the fine manufactures of France.—Strictures on the manufactures of Geneva,—and on the Spitalfields silk-manufacture.—Observations on the ineffectual attempts that have been made to improve agriculture in Scotland.—The encrease of manufactures and commerce, the only effectual way of encouraging agriculture,—exemplified in the town of Aberdeen.—Agriculture cannot possibly flourish without the aid of one of these.—Commerce alone almost always ineffectual without manufactures,—and why.—Hence the agriculture of Scotland is chiefly hurt by our neglect of proper manufactures.—An enquiry, what manufactures may be most beneficial to Scotland.—No other staple commodity produced in it that is capable of supporting a valuable manufacture, unless it be wool.—Can fine wool be raised there in abundance?—Disquisitions relating to sheep, with a view to answer this question.—Of the influence of pastures on the quality of the wool,—various examples.—Conclusion:—Rich pastures do not improve the fineness of the wool.—Abundance of food at all times necessary for the preservation of the wool;—winter food for sheep, on this account, as well as others, ought always to be provided;—Whins (furze) strongly recommended for this purpose;—Directions for propagating them.



O B S E R V A T I O N S
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N A T I O N A L I N D U S T R Y.

L E T T E R F O U R T H.

To Mr ***** London.

DEAR SIR,

September 15. 1775.

I HAVE the pleasure to acknowledge the receipt of your very acceptable favour of the 1st instant; and I am happy to find, that any thing in my power can contribute towards your entertainment.

You seem to be satisfied, that those manufactures are in general most advantageous to a state, that are employed on working up
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some of the native products of it; but you cannot be convinced that I have not drawn too strong a picture of the inconveniencies that sometimes attend the others.

For the good of a country in whose prosperity I am much interested, I could wish that your opinion should prove to be right; but facts speak strongly, and to these I must appeal as decisive in this case. You can have many opportunities of being informed with regard to the truth of those I have stated. All I desire is, that you will make the necessary enquiries at those who are capable of giving you information, and I make no doubt but you will soon find that I have in no particular exaggerated in the least.

You think too that I have entirely omitted a case that ought to have been particularly attended to in this discussion, viz. Those manufactures, that although subsisting by foreign materials, work them up to such a degree of fineness, as makes the prime cost of the materials be a matter of hardly any moment at all; so that in this case it is of little consequence whether the materials be brought from another country or not. And you mention the manufacture of thread-lace at Newport-Pagnel, &c. in Buckinghamshire as an example of this sort; and think you have heard, that something of the same sort of fine linen manufacture is carried on about Paisly, or some other parts of Scotland.

Your remarks here are very just. I did omit this kind of manufacture altogether;—not through forgetfulness, but because I did not think it of importance enough to deserve a place among those that ought to be considered as principal objects of attention to a whole nation; and as being attended with disadvantages peculiar

culiar to themselves, that ought to make them be encouraged only with very great caution.

Those manufactures always deserve to be most cherished, which afford the prospect of a constant and steady demand: for if this demand shall be apt to vary, the poor operators will be often thrown idle; which is always attended with the most distressful consequences to society. But things which minister immediately to the *real* wants and necessities of mankind, have a prospect of being more constantly called for, than those that only furnish food for luxury and dissipation: for as luxury is ruled by fashion and caprice, it may demand with the most unreasonable avidity to-day, — what it shall neglect and condemn to-morrow. On this account the plainer and coarser manufactures, that are worn by the bulk of mankind, for service, rather than for show, experience, for the most part, fewer gluts of market than those that are finer. The manufacturers of Norwich, who deal in fine crapes, and other delicate stuffs, are laid idle three times, for once that the Yorkshire manufacturer, who deals chiefly in low-priced serviceable cloths, experiences the same misfortune.

If you look over the wardrobe of your grandmother, you will perceive what revolutions have happened in the taste of mankind for laces, and other fineries of that sort. How many suits of this kind do you meet with that cost amazing sums, which are now, and have been long entirely useless! — In our own days do we not see, that one year Brussels laces are most in fashion, and purchased at any price; while the next, perhaps, they are laid entirely aside, — and French or other kinds of laces, or fine sewings, the names of which I know not, — are only prized. Muslins are sometimes preferred; — sometimes lawns, — gauzes, or other fine kinds of

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linen manufactures, are more in vogue; so that the poor manufacturer who has his bread depending upon the sale of any one kind of these, must be often reduced to very great distress.

These inconveniencies were not foreseen by Lewis XIV. of France,— who, led away by his own fondness for finery, thought to make his country the most flourishing on the globe, by making his people acquire a superiority over all other nations in those manufactures that ministered to the luxuries of mankind.—At a great expence he made them attain an eminent degree of perfection in these several arts: — and while his court was considered as the standard of elegance and taste to all the world, and so long as he himself continued to protect them with all his influence, they flourished abundantly; but no sooner did the power of that influence diminish, than they felt themselves involved in grievous distresses, so that they were obliged in a great measure to abandon these futile labours, and betake themselves to more plain, but useful manufactures; which they have now brought to such perfection, as to be able to beat the English out of many foreign markets, where they had continued unrivaled for several ages.

When we view things in this light, it may perhaps appear doubtful if the inhabitants of Geneva have made choice of the most proper kind of manufacture upon which they have their chief reliance, (that of watches, and other fine trinkets of hardware); as a taste for these fine kinds of trinkets, in which they chiefly excel, may diminish in foreign countries. But it is only a small state, so that there is less danger of their overstocking the market, than if a populous nation were to adopt in general a manufacture of the same sort. The ease, too, attending the carriage
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of such trinkets is a consideration of some importance to an inland country.

Our own silk manufacture feels some of the inconveniencies that arise from this cause; on which account chiefly, the Spitalfields weavers have given more disturbance to the nation for a century backwards, than all the other manufacturers in it when put together.

On this account, too, these manufacturers are obliged to submit to the inconvenience of remaining in a part of the country where almost all the necessaries of life are dearer than in any other part of it; because, were they to remove at a distance from court, the centre of fashions, they would not so soon have an opportunity of being with certainty informed of many circumstances that it concerns them much to know.

For these reasons I imagine it would be improper to endeavour to establish manufactures of this sort to a very great extent.—A particular place or two, may be with safety employed in that way; but when we come to consider of ways and means for employing the bulk of a nation, these are hardly deserving any degree of attention.

You seem likewise to be much surprised at the account I have given of the encouragement the manufactures had met with in Aberdeenshire, to the evident hurt of agriculture, which you had always heard was almost the sole object that engrossed the attention of the gentlemen in Scotland; so that you imagined every thing would have been made to give way to this their favourite profession; on which account you had been made to believe they

in a great measure neglected trade and manufactures of every sort. You wish that I would be a little more explicit on that head, and endeavour to explain this seeming difficulty.

In obedience to your commands, I shall throw out some further observations on that subject; which I avoided to do before, lest you might have become tired of these general observations.

You have not been misinformed. It is certainly true, that the gentlemen in Scotland have in general bestowed a greater attention to agriculture for several years past, than to any other object whatever; some of whom have attained perhaps to as great perfection in the knowledge, and accuracy in the practice, of this art, as is to be met with in any part of the globe. Nor is it less true, that no other art or profession would be encouraged by them, if it seemed to interfere in the least with the interests of this their favourite art. Yet it happens here, as in many other cases, that the interests of this too much favoured child are essentially hurt by this ill-judged partiality in its favour. It is not enough that we *wish* to make agriculture flourish: if we hope to do this effectually, it is incumbent upon us to discover what are the circumstances that may most effectually contribute towards this end.

This study seems as yet to have made but small progress in Scotland; which is the real cause of that seeming solecism of which you complain. It is a pity that it has not hitherto been more attended to; but it is never too late to amend.

There are some instances of nations peculiarly situated which have flourished by means of commerce without agriculture;—there are also a very few examples of manufactures flourishing among

mong a people who could have little dependence on the produce of the soil : but there is not among all the records of past ages a single proof of a people who have enjoyed for any length of time a spirited agriculture, without the aid of commerce, or manufactures, or both.

Nor is it possible that it should be otherwise. For without commerce or arts, what inducement has the farmer to cultivate the soil ? In this case every man will only wish to rear as much as is sufficient for his own sustenance, and no more ; so that if the soil could afford a hundred times the produce that is sufficient for them, it will be allowed to remain an uncultivated waste. And if, in that country, any man should be so foolish as to rear large crops, what would it benefit him ! Every man has enough for his own subsistence, so that he wants none of that superfluous produce. It must therefore be suffered to perish without being of any use at all to the owner.

For this reason a nation peopled only by farmers, must be a region of indolence and misery.—If the soil is naturally fertile, little labour will procure abundance ; but for want of exercise, even that little labour will be burthensome, and often neglected ;—want will be felt in the midst of abundance, and the human mind be abased nearly to the same degree with the beasts that graze the field. If the region is more barren, the inhabitants will be obliged to become somewhat more industrious, and therefore more happy. But miserable at best must be the happiness of such a people.

Those, therefore, who wish to make agriculture flourish in any country, can have no hope of succeeding in the attempt, but
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by bringing commerce and manufactures to her aid; which, by taking from the farmer his superfluous produce, gives spirit to his operations, and life and activity to his mind.

Without this *stimulus* to activity, in vain do we use arguments to rouse the sluggish inhabitants.—In vain do we discover that the earth is capable of producing the most luxuriant harvests with little labour: —our own abundant crops are produced as undeniable proofs of this in vain.— But place a manufacturer in the neighbourhood, who will buy every little article that the farmer can bring to market, and he will soon become industrious. The most barren fields will then become covered with some useful produce.—Instead of listless vagabonds, unfit for any service, the country will abound with a hardy and robust race of men, fit for every valuable purpose; and the voice of festivity and joy be heard in every corner, instead of the groans of misery, and the sighs of discontent.

Such are the happy fruits that naturally result from the alliance of agriculture with manufactures and commerce.

These are consequences that must so readily occur to any one who considers the subject with ever so little attention, that I am afraid you will think it superfluous in me to have insisted upon them at such length: yet true it is, that I have hitherto met with hardly any one person in Scotland, who seems to have attended to these particulars with such care as is necessary. Instead of this, while manufactures are totally neglected, as not meriting the attention of the country-gentlemen, in every corner you meet with many worthy and public-spirited men, who having adopted in too limited a manner, the idea, that agriculture is the only solid
basis

basis of the riches of any nation, seem to be resolved to make it flourish here in spite of all opposition; and persist, like Sisyphus, with immense labour and pain, to force the stone directly up the hill; which is no sooner left to itself, than it tumbles again to the bottom with the utmost rapidity.

But to drop this metaphor,—nothing is more common than to meet with gentlemen who, at an immense expence, procure servants and implements from England and other places, to set an example to their tenants of the way to obtain good crops of grain. Premiums are offered to excite them to emulation;—threatenings are employed to deter them,—and every argument that can possibly be devised, is used to persuade them to follow such an example: but in vain.—Their stupidity,—their obstinacy, as the gentlemen term it, but really and truly the inability of the poor tenants to do it, prevents them from profiting by these lessons. How much easier and more pleasing would it have been to them, to have begun in the right way of encouraging them, and leave the rest to nature! Have they not opportunities of observing every day, that in the neighbourhood of a ready market, no inducements are necessary to excite the common farmer to become industrious, and carry on improvements of every sort with success! A particular case occurs to me just now that is so directly in point, that I cannot resist the temptation of producing it as an example of the rapid progress with which improvements in agriculture are made when circumstances are favourable.

The town of Aberdeen has made great advances in trade and manufactures within these thirty or forty years past. The number of inhabitants has increased greatly within that period.—Money has become more plenty there than formerly.—Their manner of living is now more elegant and expensive; articles of luxury have increased.

encreased.—In consequence of good roads having become more common, horses and wheel-carriages have also become extremely numerous.— On all which accounts, the demands for fresh vegetables has greatly encreased in that place within the period above mentioned.

But, on account of the particular situation of that town, it was a matter of some difficulty to augment the produce of the fields in that neighbourhood, and supply the daily encreasing demand for these. This city is placed in the midst of a country that is naturally the most sterile that can possibly be imagined. For, unless it be a few hundred acres of ground that lie between the mouths of the rivers Dee and Don, close by the town, there was not an inch of ground for many miles around it that could supply the inhabitants with any of the necessaries of life. On the east is the German ocean;— on the south the Grampian mountains come close to the river, terminating in a head-land on the south side of the harbour called the *Girdle Nefs*;— and on the west and north, it is environed for many miles with an extended waste, the most dismal that can be conceived, in which nothing can be discovered but large masses of stone heaped upon one another, interspersed here and there with a few bushes of starved heath, or disjoined by uncomfortable bogs and spouting marshes, the most unpromising to the views of the farmer that can possibly be imagined.

But what is it that human industry cannot perform!— what undertaking is too bold for man to attempt when he has the prospect of being repaid for his labour! Even these dismal wastes, it was imagined, might be converted into corn-fields.—The ground was trenched;— the stones were blasted by gun-powder, and removed at an immense expence;— manures were purchased:—

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and thousands of acres of this sort of ground are now waving with the most luxuriant harvests, and yield a rent from L. 5 to L. 8 Sterling per acre.

In any other part of the world that I have seen, it would be reckoned impossible to convert such soils to any valuable use; and the most daring improver that I have met with any where else, would shrink back from attempting to cultivate a field which an Aberdeensman would consider as a trifling labour. Long habit has familiarised them to such arduous undertakings,—undertakings which could not be attempted any where else, as, unless in such a particular situation as I have described, the improver could never be repaid.—For in what other part of Europe could a man lay out L. 100 Sterling, or upwards, on an acre of ground, before it could be put under crop, with any prospect of being repaid?—yet this is no uncommon thing in that neighbourhood.

Nor is this all: For to such a height is the spirit for improvement risen in that part of the world, that they are not only eager to cultivate these barren fields, but even purchase these dreary wastes at a vast expence for that purpose. The last spot of ground of this sort that was to dispose of in that neighbourhood, was feued off by the town of Aberdeen in the year 1773, for ever, at an annual quit-rent, or, as we call it, *feu-duty*, of thirty-three or thirty-four shillings Sterling per acre,—although it was not then, and never could have been worth sixpence per acre, if left in its native state,—nor could be converted into corn-ground but at an expence nearly equal to that above mentioned.

It ought to be farther remarked in favour of the Aberdeen improvers, that as they are at an unusual expence in first bringing

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their grounds into culture;— so they continue afterwards to cultivate them with greater care and attention than is common perhaps in any part of the island, so that they have more abundant returns, and can afford to pay greater rents, than in any other part of Great Britain.

Could I produce a more satisfactory proof, that a good market will always produce a spirited agriculture? or is it possible to bring a more convincing argument in favour of the poor people in other corners of the country, who are accused by their proprietors of obstinacy, and other bad qualities, because they do not improve their fields in the manner the proprietors could wish;— seeing many of those who carry on improvements about Aberdeen, are people who have come from distant parts of the country, where no sort of improvements were ever carried on,— and have no other arguments made use of to induce them to do it, but the only feeling one that ever can be made use of, their own interest?

It has always appeared to me a little surprising, that mankind should have in general entertained such just ideas with regard to the means of making manufactures flourish, and such defective notions concerning improvements in agriculture. For there is no man so ignorant as not to know at once, that the only possible way to make a manufacture thrive, is to procure a ready vent for the goods; as without this every other encouragement, however liberal, must be ineffectual. And is it not sufficiently obvious, that agriculture, although it has been distinguished by another name, is, to every intent and purpose, a manufacture in as strict a sense of the word as the forming a yard of broad cloth;— and differs not in any respect from other manufactures as to the means of making it flourish?

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Perhaps, as you may never have had occasion to consider agriculture in this point of view, it may not be unentertaining to run the parallel a little farther.

What can more exactly resemble a whole nation practising agriculture without any commerce, than another nation of manufactures likewise without commerce,—supposing the latter by a miracle to be fed, like the Israelites of old by manna from heaven? Here every one, as manufacturing only for himself, must of necessity be idle the greatest part of his time; and as he could have no motive for emulation, nor any stimulus to invention, he could never attain any sort of perfection in that art he ought to have practised; so that millions of years might pass in this state, without the smallest hope of improvement.

I have hitherto considered manufactures and commerce together, as supposing that manufactures cannot be carried on without some degree of commerce. But it may be alledged, that commerce may subsist without manufactures; and that if agriculture is assisted by commerce, manufactures may not be so necessary to the flourishing of agriculture, as I have supposed.

This seems to be the opinion of many gentlemen in Scotland, who, although sensible of the absolute necessity of a market for the produce of a farm, think there is never room to complain in this respect, if that farm is situated within an accessible distance of a sea-port,—as that may be considered as a never-failing market for every produce of a farm.

The difference, however, is very great, between a market ob-
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tained by this means, and one that arises from manufactures being established in the neighbourhood. For,

In the first place, it may be often necessary to thresh out grain when it would be impossible to preserve it on ship-board in a sound state till it could reach a foreign market ;——

And, in the second place, many articles that the farmer could dispose of with profit, do not admit of being carried to foreign markets in any case whatever ; — so that he who has to rely upon these alone, must be subjected to very great inconveniencies.—— All sorts of green crops come under this denomination,— and the live stock that may be fatted by means of these ; which, in such a situation as this, require to be slaughtered, and sold at less than half the value, and three times the risk, that they might have been disposed for at a market when newly killed.

But the circumstance that is of greatest weight in this case is, that unless the farmer chance to live in a very fertile country, where agriculture has been long practised with success, he must be deprived entirely of the benefits of commerce, however favourable his situation may be for that purpose.

For as merchants are induced to settle in a place, and carry on any particular branch of business, only when there is an opportunity of carrying on that branch of business on an extensive scale, — corn-merchants cannot be expected to settle in any country where the articles he is to deal in are not to be found in abundance, so as to keep him fully employed at all times.

The farmer, therefore, who finds himself placed ever so near a
sea-port,

sea-port, if he has not the advantage to meet with merchants settled there, is nearly in the same state, as if he lived in an inland country at ever such a distance from markets *.

For before he can have access to these markets, he must be able to furnish, at once, such a quantity of grain as will load a whole vessel fit to carry it to the market.

He must, in the next place, become merchant himself,—must settle a correspondence at the port to which he is to send it;—be acquainted with the character of the persons he has to deal with, the prices of the market, and all other circumstances requisite in a complete merchant.

But who does not see how difficult it is to meet with any man who is in such circumstances as admit of doing this, or has a capacity for it, who would submit to place himself in such a disagreeable situation? or who does not perceive how incompatible this profession would be with the business of a farmer?

And if it be next to impossible to meet with one man who is capable of doing all this,—what advantages can it be supposed a common farmer can reap from that situation, who is ignorant of every thing but his own affairs; which must, and ought ever to be the case with the bulk of farmers! He is nearly in the same situation, that a mere plain manufacturer in the neighbourhood of Leeds or Wakefield would be, if the markets of these two places should be destroyed, and he himself should be obliged to send his small stock weekly to Holland, London, or the other markets to

* It is on this account chiefly, that the free commerce of corn, which is so beneficial to England, is but of little use to Scotland.

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which his goods at present are sent.—Just now he labours at home contented five days in the week, carries his web upon his shoulder on the market-day, and returns with the price of it in his pocket, or with necessaries for his family purchased with it.—But instead of that, he would then be obliged to wait till he should get a whole ship-load,—form a correspondence with the people in the different countries to which they are sent, negotiate bills, and do other things that have no more concern with his business as a manufacturer, than he has with the employment of a minister of state. Is it not plain, that not one man out of a million could be capable of doing this? and that of course the manufacture there would be totally destroyed, although the power of sending his goods to a foreign market remained the same as before?

Such are the unfurmountable obstacles that lie in the way of a farmer in an unimproved country, who has nothing but commerce alone to depend upon for providing a market for the produce of his farm.

No earthly method therefore remains for encouraging agriculture where it has not yet reared up its head, that can be considered as in any way efficacious, but the establishing proper manufactures in those countries you wish to encourage; or bestowing the most liberal encouragement to corn-merchants to settle in it; which, although it would be of some use, is far less beneficial than manufactures. So that I now return to the same point where I ended my last letter,—and proceed to make some remarks on the nature of sheep and wool.

Few animals are of greater utility to man, or have been less attended to in general by modern nations, than sheep. Certain peculiar

culiar notions prevail with respect to the management of this valuable animal in every particular district, which have been adopted no body can tell how, and are adhered to with a blind perseverance, that but ill accords with the idea we are taught to entertain of the liberal turn of mind of modern improvers. And as these opinions influence the practice of the greatest part of the sheep-breeders in Europe, it is of consequence to examine them with attention, in order to rectify the abuses that may have been thus introduced into practice; and to encourage those to begin to make improvements in this respect, who have hitherto been deterred from attempting it, by the dread of the evils they were threatened with by these false theorists. And as I have bestowed a more than ordinary share of attention on this subject, I shall hope to have your excuse if on this occasion I endeavour to investigate it with a scrupulous degree of precision.

In the course of this investigation you may naturally expect to meet with some things that will have a little of a paradoxical appearance; as contradicting directly several opinions very universally received. But I make no doubt that you will, with calm impartiality, weigh the arguments that may be produced in defence of these opinions: and if you should find any of them unsatisfactory, be so kind as communicate your opinion on these heads with freedom, that I may have it in my power, either to convince you by more conclusive arguments, or to retract my opinion where it may chance to be erroneous. For you know I am no advocate for infallibility in man; or at least have not yet attained that high degree of eminence as to be intitled to claim it for myself.—I enquire with candour, and deliver my opinion with freedom; but I have no party to serve, nor any theory to defend.

I find it has long been a prevailing opinion, that richness of pasture *, and temperature of climate, have a great tendency to improve the quality of the wool of sheep : and that fine wool cannot be produced but in countries that have been improved by sowing artificial grasses, turnips, &c. ; on which account it may be imagined that no good wool could be produced in the high lands of Scotland. But, upon a careful examination, I have not met with one fact that tends to prove, that rich pasture improves the *fineness* of the wool, although I have met with a hundred vague assertions to that effect.

If with a view to ascertain this fact, we attend to the nature of the places that are well known to produce the coarsest or the finest wool, we shall not find that either of these peculiarities have any necessary connection with the richness of the pasture.

The finest wool in England is produced about Leominster in Herefordshire, the south downs of Sussex, and on Cotswold downs in Gloucestershire; yet it is well known, that in neither of these places is the grass remarkable for its richness. The latter, especially, is a bleak situation, where no sort of improvement has ever taken place.

The other places in England remarkable for the fineness of their wool, are the Isle of Wight, Romney marsh, and Lincolnshire. Now although it is allowed that Romney marsh affords exceeding rich grass, and that in both the other places there is abundance

* The reader will find, that I have been here obliged to repeat some of the arguments enumerated in the Essays relating to agriculture and rural affairs. The subject here necessarily required that these should not be omitted ; they make, however, only a small part of what is here mentioned about sheep and wool.

of very good pasture; yet a great part of the sheep-walks in both these places afford but very indifferent pasturage.

If rich grafs makes valuable wool,—whence comes it that no other places in England can equal the places above named in this respect? for as good mutton is produced in almost every other county.

In Buckinghamshire their sheep are among the largest, and their mutton the fattest, in England; yet the wool of that county is of the very coarsest quality.

The rich pastures of Holland and Germany, likewise nourish abundance of sheep, and yield mutton as good as can be found in any part of the world; but their wool cannot be compared with ours: while the barren mountains of Leon and Asturias in Spain nourish great flocks of sheep that yield the finest fleeces in Europe.

From this review it would seem that the nature of the pasture has but little influence on the *fineness* of the wool; and that therefore we ought to attribute the peculiarities we meet with in this respect to some other cause.

It was in consequence of the following accidental experiment that I was led to make the foregoing observations.

A farmer of a more enterprising spirit than ordinary, with whom I was intimately connected *, having been dissatisfied with the

* My own father, who died when I was but a child.

quality of the wool that his sheep afforded, put away his whole flock, and supplied himself with some fine-wooled English sheep in their stead.

It happened that the only walk he had for his sheep was a common, on which he and a neighbour-farmer had an equal right of pasturage. And as it was not of great extent, they employed one shepherd to keep both their flocks, so that his sheep were intermixed with those of his neighbour. And although the rams were common to both flocks, yet, merely in consequence of the difference in the ewes, the wool of the one part of the flock continued to be sold at more than 25 per cent. dearer than the other, at the distance of thirty years from the time they were first brought to the common.

This is a fact that I have particular reason to know for a truth; and seems to prove, in a very satisfactory manner, that the nature of the pasture, whatever effects it may produce in other respects, has but very small influence upon altering the quality of the wool.

It is likewise worth remarking, that in the year 1666, the English having prohibited the importation of live cattle from Ireland, the inhabitants of that country were obliged to turn their attention to the rearing of sheep. A breed of the valuable sort was in consequence of this transported from England; which have thriven so well, and continue to afford such fine wool, as enables the Irish to rival the English in some of their finest woollen manufactures, particularly poplins and capes; which has obliged the English, ever jealous of any rival in this their favourite manufacture, to cramp them with such prohibitory laws as prevents them

them in a great measure from vending these any where out of their own country. So that we see there is little reason for believing, as is commonly with confidence asserted, that the fineness of English wool is entirely owing to the peculiar richness of their pastures.

It is likewise well known, that the shire of Galloway at present produces finer wool in general, than any other part of Scotland; which is entirely occasioned by a breed of English sheep, that were introduced into that country about fifty or sixty years ago, by Mr Heron (as I am told), which has improved the wool to the degree for which it is at present remarkable. For before that it was in no respects better than the other wool of the country *.

I might add many other observations tending to show, that improvements by artificial grasses, turnips, &c. do not tend to produce any alteration on the fineness of the wool of sheep fed upon them: but fearing that you may be already tired of this subject, and wishing rather that you should satisfy yourself as to this particular, by attending to such circumstances relating to this as may for the future fall within the reach of your own observation, I shall not longer insist upon it at this time.

It is, however, very necessary for me here to remark, that although it seems evident, that richness of pasture has no effect in altering the *fineness* of the staple of wool; yet it is certain, that

* Hector Boethius, who takes notice of the fineness of the wool of several other parts of Scotland in terms of the highest applause, mentions that of Galloway as under: "Annandale, Niddesdale, and Gallawaie, beside fine wool and store of cattle, doth also abound with all kinds of grain, wheat only excepted." *Holingshed's translation*, p. 9.

unless a sheep shall have as much food as is necessary to keep the animal at all times in perfect health, and good plight of body, the goodness of the wool in other respects will be considerably impaired. For it is an undoubted fact, that a poor diseased sheep never produced a fleece of wool of the best quality; as, in these cases, however *fine* it may be, it is hard and dry, and wants that softness and strength which is so essentially necessary for rendering the wool pliable in working, and durable in wearing.

In this sense, therefore, richness of pasture may have some effect upon the *quality* of the wool; because in *feeding* countries the sheep are always kept in very high condition, which is not always so much attended to in *breeding* countries. But this inconvenience may in every case be avoided even in these countries, by taking care never to overstock the pasture. For if this is attended to, no animal will continue longer in good health on poorer fare than a sheep.

On this account also it is of great consequence to guard against an accidental temporary want of food, from the long continuance of a storm of snow in winter: for if the sheep should be then too much stinted in this respect, the wool which grows at that season will be so tender, as to break through at that place much more readily than any where else, so as to become incapable of being properly manufactured. The wool-buyers, though ignorant of the cause of it, are well acquainted with this defect in the wool; and therefore never fail to try its strength between their hands at buying, and if it break with much ease about the middle, it is rejected.

As this must always be attended with loss to the farmer, and
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the inconveniencies that he must feel in other respects from this temporary want of food are very great, it behoves every considerate farmer to guard against it with the most anxious solicitude. In most situations this may be done by providing a stock of hay for that purpose : A thing but too little attended to by most of the sheep-raisers in Scotland, which tends greatly to impair the quality of our wool, so as in many cases to render the manufactures made of it not only less beautiful to look on, but also less durable in the wear, than they otherwise would have been.

In most situations this inconvenience may be guarded against by providing a moderate stock of hay to be set apart entirely for this use ; and in some situations turnips may be provided for this purpose. But an easier method of effecting this end in a great measure, especially in mountainous countries, is to propagate abundance of whins (furze), which, if sowed upon high and exposed situations, will there be in little danger of ever being entirely covered with snow ; and will afford the sheep at all times during the winter-season abundance of the most wholesome green food, when all other plants are withered and insipid. It likewise affords a comfortable shelter from the wind, from which-ever quarter it may blow : A circumstance that those who live in a sheep-country well know to be of the utmost importance to the well-being of this useful animal at all times, but more especially, in the spring, when the lambs are young and tender, which are allowed to bask themselves and *batten** in the sun, when, without its assistance, they would be shivering with cold, or pining in misery. And

* A word now obsolete, that is so expressive as to compel me to use it on this occasion. It means that kind of fattening, or good plight of body, that proceeds from ease, and high enjoyment of health.

as this plant blossoms very early, and produces flowers in prodigious abundance, it furnishes likewise a ready food to the lambs, that they seem to be fonder of than any other, by the help of which they live more comfortably, and can be reared earlier in the season than they could be by any other means. This plant therefore deserves to be cultivated with care by the sheep-breeder, as a precious blessing that Heaven has put at all times within his power to command.

You will perhaps be surpris'd to hear me speak with so much warmth in favour of a plant that has been often proscribed by writers on agriculture as a most pernicious weed. But although it may be justly deemed such in some situations, it is in others, as I have said, a most inestimable blessing. All quadrupeds during the winter-season seem to prefer it to almost any other food, and may be nourished upon it to the greatest perfection. Its prickles prevent horses or cows from browsing upon it readily until it is bruised; but when it is thus prepared, they are greedy of it to a degree that is scarce conceivable. I have seen horses which had once tasted it, neighing in their stalls for want of it, when their racks were filled with the best hay; — and when corn and bruised whins have been offered to them, they have left the former, and consumed the latter with the greatest keenness. And I have known instances where horses have been nourished by this alone for months together, although hard-worked all the time, that have fallen off in flesh and spirits when they were afterwards put upon hay and oats.

But however valuable it may be for these animals, the difficulty of gathering and preparing it for them is so great, as to prevent it from ever being of very extensive utility with regard to them:

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but as sheep can easily be brought to nip off the single prickles one by one, they can be fed upon it without any trouble to the owner; and therefore it ought always to be provided as a winter-food, even without regard to the consideration above mentioned. In summer the juices of this plant become less palatable to most animals, and therefore they will at that season prefer succulent grasses to it if it is at their command.—But even then it is preferred by them before coarse grasses, or heath (liny) of any sort. So that where-ever the fields abound with this last plant, it would always be a very great improvement, to substitute this more valuable one in its stead, as there can be no doubt but the same field, when filled with whins, would maintain at least three times as many sheep as if it were covered with heather.

Considering it therefore in this light, it must be deemed a lucky circumstance for the farmer that it admits of being so easily propagated: For the seeds of it, if scattered on any bare piece of ground, at almost any season of the year, will not fail to come up, and thrive in any soil that is dry; for wet is its only unconquerable enemy. But where the earth is covered thick with heather, it is only necessary to turn up a spadeful of earth where you wish a bush to grow, and strew a few seeds upon the new turned up mold, which will quickly germinate, and advance without any further trouble or care.

In this manner might very extensive tracts be quickly filled with this plant, which would not only tend to beautify, but highly to improve the country where extensive heather moors abound. As it continues to propagate itself where-ever it is once established, there is no danger that ever it would stand in need of being renewed.

I thought the knowledge of these circumstances relating to this plant would be agreeable to you, as I imagine they will at least have the advantage of novelty to recommend them. But as I suppose you are heartily tired of this very long letter, I shall relieve you for the present. In a short time, however, you may expect to have some observations on the influence of climate upon the quality of wool.——Till then adieu.

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N A T I O N A L I N D U S T R Y.

L E T T E R F I F T H.

O B S E R V A T I O N S

C O N T E N T S.

Disquisitions relating to sheep and wool continued.——Of the influence of climate on the quality of wool.——Warm climates have been often imagined most favourable for producing fine wool: — Hence it has been concluded that fine wool could not be reared in Scotland.—— This opinion is erroneous, — as experience shews that very fine wool has been produced in Scotland, — exemplified by an anecdote of Marshal Keith, — by the testimony of the author of the Atlas-General, — by that of Hector Boethius. — by a letter written in the year 1774, — by various well-authenticated facts collected by the author.——Unprejudiced reason would make us expect to find fine wool only in cold climates.——This opinion confirmed by experience, resulting from an extensive survey of this globe, and a minute attention to the nature of the climate of all those places where fine wool is produced.



OBSERVATIONS

ON

NATIONAL INDUSTRY.

LETTER FIFTH.

To Mr ***** London.

DEAR SIR,

September 26. 1775.

IN such northern climates as ours, we so often experience the hurtful effects of cold, and feel in such a powerful manner the beneficial influence of heat, as makes us have a partial fondness for warm regions, and imagine that the meliorating influence of the climate is extended to almost every thing that is there produced.

It has probably been in this manner we have first adopted the opinion, that the wool produced in warm regions was necessarily of a finer quality than that which is found in colder climates. But as it is of great importance to have this fact ascertained with certainty, it will not be right in us to acquiesce in this opinion, till we see if it is supported by experience or sound reasoning.

The prejudice is in general so strong against the opinion, that very fine wool can be produced in cold climates, that I shall not be much surpris'd if you should find yourself at first disposed to doubt the truth of the following anecdote, which I had from a gentleman of undoubted veracity, and is indeed so well known by thousands in this neighbourhood that nothing can be ascertained with greater certainty.

About the beginning of the late war, the magistrates of a considerable town in the north of Scotland, famous for its manufacture of worsted stockings, desirous to express, in some measure, the esteem they bore for their countryman the late Marshal Keith, resolved to make him a present of a pair of stockings of their own manufacture, of an uncommon degree of fineness. With this view they commissioned from London some of the finest wool that could possibly be found; without any limitation of price. In consequence of which, some pounds of the very finest Spanish wool, picked out by very good judges of this matter, were sent to them.

When it arrived, the magistrates sent for the women who were to manufacture it; and having told them what they wanted, showed them the wool they had got for that purpose. But when the women had examined it, they complained of its quality; saying

ing it was so coarse that they could not undertake to draw above *forty heeres* * from the pound of it; but added, that if the magistrates would wait till the *Highland wool* came to their own market in the month of June, they would there pick out wool for themselves, that they would undertake to spin to the fineness of *seventy heeres* from the pound.

As they were entirely unanimous in this opinion, the difference appeared so very great, that the magistrates agreed to their request, and waited till the Highland wool came to market; where the women provided themselves with wool that they spun to the fineness they had promised. The stockings when finished were valued at upwards of five guineas the pair, having been so fine that they could be with ease drawn through an ordinary thumb-ring together, although they were of the largest size. They were sent in a box of curious workmanship to Marshal Keith; who thought them such a curiosity as to be worthy of the acceptance of the Empress of Russia, to whom he afterwards presented them.

This fact happened not many years ago, and can be authenticated by thousands of witnesses now alive, should it be judged necessary; and proves in a very satisfactory manner that the Highlands of Scotland are capable of producing as fine wool as is perhaps to be met with in the world.

Nor is this the first fact upon record that points out the fineness of the Highland wool.—For it deserves to be remarked, that the author of the *Atlas-General*, a book published above forty or fifty

* *Heere* is a term in the manufacture of yarn denoting two *cuts*, each cut containing 120 threads, each thread measuring two yards and a half. A *heere*, therefore, is a thread measuring 600 yards in length.

years ago, when enumerating the several manufactures in Scotland, observes, "They make worsted stockings at Aberdeen from ten to thirty shillings per pair. They are spun of *fine wool from the Highlands*; and so much valued, that mens stockings of that sort are sometimes sold at fifty shillings or three pounds per pair*.

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* Since writing the above I have been at pains to make particular enquiry about the fine woollen manufactures of Aberdeen,—and have learnt the following particulars, that may be relied upon with certainty.

The late Earl of Aberdeen bought a pair of woollen hose at Aberdeen when he was married, about the year 1707, for which he paid L. 4, 4s.—He afterwards gave them in a present to the Earl of ———, his father-in-law, as a curiosity.—This fact I learnt from a very old man, still alive,—who was his Lordship's principal servant at the time,—who bought the stockings, and paid for them.

A lady of the strictest honour and veracity assured me, that a person with whom she was intimately acquainted, and nearly connected, was in the practice of manufacturing fine woollen hose, that were often sold from two to five guineas per pair; and that she had particular reason to recollect, that about the year 1733 one pair was sold to Mr George Keith, advocate in Aberdeen, for either L. 5, 5s. or L. 5, 10s. she does not with certainty recollect which, but rather thinks it was L. 5, 10s.

Being interrogated as to the wool of which these were made, "she is certain that *the finest stockings were made of Highland wool bought at the cross of Aberdeen.*"

Another lady, who was also intimately acquainted with some of the persons who were in the practice of manufacturing very fine hose, being interrogated as to the fineness of the yarn of which they were made, returned this answer:—"I remember *she*, (viz. the person who manufactured the fine stockings) *told me, she had some more than an hundred heeres from the pound:*" so that a pound of wool was drawn into a thread of upwards of 60,000 yards (about thirty-four miles) in length,—an astonishing degree of fineness.

The same lady being interrogated as to the wool, made answer,—"*I am certain it was Scotch wool.*"

The same lady proceeds, "I likewise remember to see three pairs of woollen gloves for Lady Mary Drummond, one of the Duke of Perth's family, for each pair of which she got three guineas. And that afterwards Lady Mary sent for as much yarn as would be a pair, and also for some of her knitting-wires," &c.

I have heard of many other persons whom I could name, were it necessary, that
were

The wool of Scotland seems to have been remarked for its fineness in some particular districts at a much earlier period: for Hector Boethius, who was a professor in the university of Aberdeen, and wrote about the year 1460, as quoted by Hollingshed in his Scottish Chronicle, p. 12. says, that "Buchquhane (now "Buchan, a district of Aberdeenshire) is a very valuable soil for "all kinds of cattel, but especially sheep, *whose woole exceedeth "that of the like beast of all other countries thereabouts, for whiteness "and fineness."*

But as this only marks the proportional degree of fineness of the Buchan wool when compared with other places around it, some may think it indicates not any uncommon degree of fineness when compared with England or other places. He adds, however, a little afterwards, "There is also in this county (Angus) "one place, called *the Vale of Esk*, whose sheepe have such white, "fine, and excellent wool, *as the like of it is hardly to be found a- "gain within the whole island."*—And as England was at that time remarkable for producing wool of as fine a quality, at least, as

were then in the practice of manufacturing hose, at two, three, or four guineas per pair,—*all of Scots wool*. Nor is this art entirely forgot yet, although much neglected of late: for there were at one time within these few months past no less than six pairs of stockings, in the shop of Mr James Burnet clothier in Aberdeen, that were sold for two guineas a-pair.

It may likewise be of importance to remark, that the wool of the sheep in the Zetland isles is so very fine, that a great many pairs of hose are annually manufactured of it, and sent to market, and sold at ten or twelve shillings a-pair — The filaments of the best Zetland wool are much finer and softer than Spanish wool.— In colour and softness it in some measures resembles Vigonia wool; — but the poor people there are so ill acquainted with the proper manner of sorting wool, that the coarse parts of the fleece are never thoroughly separated from the fine, which makes their manufactures much less valuable than they would otherwise be.

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any in Europe ; if we should even allow for a small degree of exaggeration, we shall be obliged to acknowledge, that there is reason to conclude, that very fine wool was produced in different places of the north of Scotland at that time.

The foregoing facts are still further confirmed by the following extract of a letter to Mr David Loch, dated October 5. 1774.

“ As to the quality of some of the wool bred on the west coast of
“ Scotland, I can with certainty say, that it equals that of
“ Spain : for by a comparative trial I made some time ago, by
“ bringing some of it from sheep killed for my own use, I carried
“ it to Mr Alexander Smart at Muffelburgh ; who compared it
“ with his Spanish wool, and said it was equal if not superior to
“ any he had ever seen from Spain ; and begged me to procure a
“ quantity of it for him : but his death, which happened soon
“ after, put an end to the scheme.”

“ However, though I did not bring wool, I brought worsted
“ which was manufactured here, and much admired by the ma-
“ nufacturer for its softness and strength ; who begged to have
“ some of it sent, though at an advanced price.”

These are facts which prove in a very satisfactory manner, that Scotland did formerly produce, still does, and may continue for the future to produce wool of an exceeding fine quality.

Nor would we perhaps have deemed this a circumstance of such an extraordinary nature, had not our minds been prepossessed with an undue bias in prejudice of northern climates. For if we had reasoned from analogy, and judged of the effect that it might have been expected cold would have had upon the wool of sheep,

by what it is known to have upon the furs of other animals, we would have been led to expect that the finest wool could only be produced in the coldest climates; as it is well known, that cold climates alone are naturally fitted to produce, and rear to the utmost perfection, animals bearing warm furs; the fineness and closeness of which are always in proportion to the coldness of the climate, nature having thus provided for the inhabitants of these cold regions a plentiful supply of those materials which are best suited for defending them from the rigours of the season; while the inhabitants of warmer regions are blessed with the more delicate silk-worm, which affords them materials for forming vestments more suited to their wants. Now, as the sheep is evidently an animal of this class, and its wool the most plentiful and beneficial kind of fur, we ought naturally to have been led to expect, that, like every other kind of fur, it would have been closest and finest in cold regions, and in every other respect more valuable than that which should be produced in warmer climates.

It is, however, sometimes dangerous to trust too implicitly to reasoning *a priori*; but it is always of use to attend to the hints that may be suggested by that means, so far at least as to be certain that any opinion that may seem to run counter to it has been adopted only in consequence of experience and accurate observations. Let us try how far this will hold good in the present case.

With this view, let us take a more extensive survey of the globe than we have yet done; and remark the nature of those places where different kinds of wool are produced: for as there are particular places even in tropical regions that are extremely cold, unless we take care to distinguish these, we can form no proper judgement as to this particular from the latitude of different places. The Andes in America, although directly under

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the line, are perpetually covered with snow *; and every mountainous country experiences a degree of cold in proportion to its height, in whatever latitude it may be placed. The peak of Teneriff is as perpetually covered with snow as Mount Hecla; and the mountains of Ararat are equally buried under ice as the Alps of Switzerland.

This being premised, we need not be surpris'd if we should meet with fine wool in regions of low latitudes, even although it should be certain that a considerable degree of cold should be necessary for

* "Both parties," says Don George Juan, speaking of himself and his companions, "when upon the hills near Quito, suffered not a little from the severity of the cold; which was the more painful to us, as we had been but little used to such sensations. Thus, under the *Equinoctial*, where it was natural to fear we had most to apprehend from heat, our greatest pain was caused by the excessiveness of the cold. Though our hut was small, and crowded with inhabitants, besides the heat of the lamp; yet the intenseness of the cold was such, that every one of us was obliged to have a chaffing-dish of coals. It may easily be imagined what we suffered from the asperities of such a climate. Our feet were swelled, and so tender, that we could not even bear the heat; our hands were covered with chilblains; our lips swelled and chapped, so that every motion in speaking, or the like, drew blood, &c. — While we were eating, every one was obliged to keep his plate over a chaffing-dish of coals, to prevent his provisions from freezing. The same was done with regard to water." Book 5. chap. 2.

Again, he observes, Book 6. chap. 7. "Some of these mountains seem as if they were founded on others, and rise to an astonishing height, which are covered with snow even to their summits. The Parama of Assuay is not of this class. Its height is the degree in this climate where a continual congelation commences; and as these mountains exceed this height, so they are perpetually covered with ice or snow; and from a determined point above the surface of the sea, the congelation is found at the same height in all the mountains," &c.

The same might be remarked of every mountain on the globe, with this only difference,—that under the line, from the little variation of the seasons, this point of congelation remains nearly at the same height at all times; whereas, in higher latitudes, it varies greatly at different seasons of the year.

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producing it. And in fact it seems to be a rule without exception, that no fine wool is produced in any southern climate, unless in countries remarkably mountainous and cold.

Thus, in Africa, we find, that about Mount Atlas, and along the northern parts of that large peninsula, some wool is produced, which, although of a much coarser quality than that of many places in Europe, is fine in comparison of any wool that grows in the more southern parts of Africa; the sheep of these regions yielding only a thin coat of a particular kind of wool as coarse as goats hair. Nor is there any place throughout the whole torrid zone where any tolerable wool is produced, except on the Andes of America; on some parts of which the sheep originally sent from old Spain continue to carry very fine wool, as well as the native sheep of the country called *Lama's*, *Paco's*, and *Vicunna's*. But all of these feed in the mountains, where the cold is as intense as in any habitable part of Europe*.

In Asia,—there are some parts of Persia, and the province of Cashemire in the northern parts of Indostan, which afford wool of perhaps the finest quality of any in the world. But the sheep that yield the fine Persian wool are kept upon the bleak mountains of Armenia the greatest part of the year, whose tops are continually covered with snow†; and the Cashemirian wool grows on

* In the district of Lipes in Peru, Ulloa observes, that “l’air y est tres froid, & le terroir n’offre que des parages où l’on nourrit de grands troupeaux de vieunas, d’alpueas ou tarugas, & de amas, animaux assez communs dans les hautes montagnes, où le froid est continuel.” Prev. Coll. Voyag. t. 13. p. 315.

† Tavernier speaking of mount Ararat says, “Elle est comme detachée des toutes les montagnes de l’Armenie, qui font une longue chaine, et depuis le milieu jusques au sommet elle est contennuellement couverte de neige.” t. 1. p. 43.

those cold mountains that divide that province from Thibet, where the cold, according to Bernier, is so intense as to keep the country continually frozen for near one half the year *.

Since, then, we find, that no fine wool is ever produced in warm climates, excepting in such districts of these as are remarkable for their intense degree of cold, it would seem that experience, as well as reasoning, points out in the strongest manner the bad effects of heat in this respect, and ought to compel us to rest satisfied, *that a cold climate is best for producing fine wool.*

These facts seem to be conclusive as to this particular; but the foregoing reasoning acquires a still more incontestable degree of evidence from the concurring testimony of all our navigators who have occasion to sail to warm climates, who invariably assert, that the sheep which they carry with them from Europe for live stock, lose their fleeces in these warm regions, which they never again recover till they are brought into a colder climate; and that, instead of wool, there grows upon their bodies, in these warm climates,

* He says, it is a miserable country, covered with snow during five months of the year; and that the only commerce of the country is for musk, chrystal, and jachem: "Mais sur tout de laines, les unes des brebis (qui est plus fine que celle d'Espagne), les autres qui nomment *touz*, et qui approchent plutot du poil de castor que de laine." t. 1.

He further adds, that the natives manufacture their wool into a kind of cloth called *chales*, consisting of a yard and a half in length. The finest of these that are made of sheep's wool, sell at the highest for fifty rupees, (L. 6, 5 s.); whereas those that are made of the fleece of the *touz* sell for a hundred and fifty, (L. 18, 15 s.)

L'Abbe Raynal says, that they manufacture of the same fine wool turbans for the omrahs and other grandees, of a yard in breadth, and somewhat more than three yards in length, which sell from 2400 to 3600 livres a-piece; that is, from about L. 100 to L. 150 Sterling. Hist. Philos. t. 2. p. 31.

a thin coat of a particular kind of hair, hardly at all resembling wool, exactly like that which grows upon the native Guinea sheep.

This is a fact so universally well known and acknowledged for a truth by every one who has been either in the East or West Indies, as ought assuredly long ago to have destroyed the vulgar prejudice in favour of warm climates with regard to the production of fine wool, were not mankind in general more disposed to acquiesce in any opinion that may be first suggested to them, than be at the trouble of exercising their reasoning faculties in a road that has not been smoothed by others *.

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* Since writing the above, I have been assured by a gentleman of the strictest honour and integrity, who lived long in the West Indies, that he has seen hundreds of sheep that had been brought at different times from Europe, which have been kept in these islands for years together, and always yielded the thin kind of hair above described instead of wool, so long as they remained there. He added, that these sheep are sometimes brought back to Europe by way of live stock, or for the sake of their milk; and being usually very lean before they arrive, they are sometimes put ashore in Britain to get into flesh before they are killed: but when they arrive, they have so little the appearance of any European animal, that they are usually called by the vulgar *West-Indian Deer*.

In a short time, however, they lose that shaggy hair,— their fleece of wool begins to grow upon them, and they quickly become in every respect the same as the other sheep of the country from whence they were originally carried.

After having written the above, I showed it to the gentleman to whom I formerly alluded; who made the following observations upon it, which I have his permission to insert in his own words.— “If (says he) the author has no other authority but mine for all that is here said of such sheep, some abatement must be made from the account given of them. What I know about this matter, and what I am ready to vouch, even upon oath, is as follows. I have seen in the West Indies several sheep with hair rather than wool, somewhat like goats hair, and was credibly informed, so that I had no reason to doubt, they were brought from England. Again, after my return to London, I was credibly informed, that such sheep being brought back,
and

I have purposely declined taking any notice of the peculiar mode of management of their sheep in Spain, till you should be made acquainted with these facts, as from a knowledge of these you will be enabled to discern clearly the utility of the practice that in general prevails in Spain with regard to the management of sheep; and to explain the reasons why in a country, many parts of which are warm to a considerable degree, they have been able, for so many ages, to prevent their wool from degenerating. But that you may be allowed to amuse yourself with your own conjectures on this head for some time, I shall reserve it as the subject of another letter; which will not perhaps be the least interesting of this whole series.——I am, &c.

and put into the fine pastures on the banks of the Thames, recover their wool, and become again like other English sheep.— I have heard too, that while they are in their shabby state, the vulgar call them *Indian Deer*. I not only firmly believe all this to be true, but am also fully convinced, that, upon enquiry made about it in London, the fact would be as well attested as any other fact whatsoever.

“ It is very penal to export sheep from England; therefore I can hardly think that many are exported, unless for great profit, to France, or some other country in Europe. I must add, that there are many thousands of sheep in the West-Indian islands and continent, which, it is well known, came all originally from Europe, and have hair instead of wool. Of these I have seen no doubt many hundreds. So far I could and would say upon the most solemn examination in the highest court upon earth; and this I think is enough for your argument.—I have seen goats at sea for the sake of their milk, and believe it very common, but never any sheep for that purpose.”

O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R S I X T H.

C O N T E N T S.

Disquisitions relating to sheep and wool continued.——Of the management of the sheep in Spain.——The fineness of their wool is to be chiefly ascribed to their perambulations there,—exemplified in the sheep of Andalusia, which do not migrate, and carry very coarse wool.——A temporary heat at any particular season of the year, renders the wool that is produced at that season greatly coarser than what grows upon the same sheep at other colder seasons,—proved by a series of experiments and observations on wool by the author.——Inferences — farther confirmed by experience.——Anecdote of Earl Marischal relating to Siberian lambs wool.——The climate of Great Britain more favourable for the growth of wool than any other in Europe.



OBSERVATIONS

ON

NATIONAL INDUSTRY.

LETTER SIXTH.

To Mr ***** London.

DEAR SIR,

October 2. 1775.

THE earliest records we have of Spain mention their wool as particularly fine *; and as it was a considerable article of commerce, it has probably at all times obtained a very particular share

* Strabo mentions fine wool as one of the principal articles of commerce carried on from Spain; and, speaking of *Turdetania*, one of its provinces, now a part of Portugal, he has these words. “*Frequens inde primum vestis veniebat, nunc ve-*

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share of their attention. But when the Moors, in the eighth century, over-ran that country, and drove the natives to the mountains in the northern parts of that kingdom, their monarchs themselves might be said to be little better than shepherds; and the produce of their flocks was, in all probability, their only revenue. And even after the Moors were gradually forced to retire, this seems to have continued long a very considerable part of the royal demesne *: for till of late, all the sheep of that country belonged

“ro *Coraxorum* amplius lanificium excellentissimæ pulchritudinis, unde admiffarii
“arietes talento emantur.” The *Coraxi* were a people of *Asia*. We may remark by this passage, that fine wool had been in very high estimation under the Roman emperors, as they gave such a high price as a talent, equal to L. 216 Sterling, for a ram, for improving the breed.

* It is computed, that the number of sheep that formerly belonged to the crown amounted to five millions, which yielded such a considerable revenue as to give it a just claim to the title of *The precious jewel of the crown*, which the kings of Spain bestowed upon them in their ordinances. To take care of these, a royal council was formed, under the title of *The council of the grand royal flock*, which exists to this day; and the laws relating to sheep in Spain have been digested into one code, and published in a large folio volume, under the title of *The laws of the royal flock*, although the King has not now a single sheep.

Ustariz, a very well informed author, computes that the sheep in Spain do still amount to upwards of eight millions, which require forty thousand persons at least to keep them. His words are, “Para que veas quan grande es el numero de gente,
“ (his argument led him here to take notice of the propriety of encouraging those
“ occupations that tended to produce active subjects to the state), que se emplea en
“ el penoso exercicio de guardar el ganado lanar, dire, que en el cierto papel,
“ que un ministro de graduacion, inteligente, y digno de fê, me comunicò po-
“ cos años hà, explicando los muchos motivos, que obligan a cuidar de su con-
“ servacion, y aumento, se refiere que el ganado lanar *trasumante*, que se transfi-
“ ere todos los inviernos a Estremadura, llega a quatro millones de cabezas; y
“ que para el cuidado de 20th se emplean 100 personas, poco mas, o menos, se-
“ gun estan unidas o divididas las dcheffas, lo que corresponde a 20,000 hombres;
“ y assegurandose por algunos autores, que el numero de las ganados *estantes* (que
“ son

longed to the crown. But in proportion as the monarch became more ambitious and needy, these flocks were gradually alienated, this being a ready mean of filling the coffers of every inattentive monarch.—This kind of traffic, however, could not long continue; — the whole stock was in a short time exhausted, and the last flock was sold by Philip I. to the Marquis of *Iturbleta*.

While the sheep remained the property of the crown, they naturally obtained a very great share of the attention of the legislature. —Numerous laws were made for protecting the flocks, and regulating every circumstance relating to them, which have been since collected into a large folio volume, entitled, *the laws of the royal flock*. It was at that time that the regular subordination of shepherds that still prevails in that country was first established; and under the powerful influence of the King, private interest was made to give way to the conveniencies of the state, so as to remove every obstacle that might have interrupted those regular and extensive perambulations of their sheep, so necessary for the health of the flock, and preservation of the wool. But as you are

“son los que no baxan a Estremadura), es mucho mayor, se puede creer, que pas-
 “saran de 40,000 personas que se ocupan en el resguardo, y cuidado de los gana-
 “dos trasumantes, y de los estantes; y mucho mas en los tiempos presentes (this
 “was about the year 1740) en que aseguran los praticos, haverse aumentado
 “considerablemente, assi con el beneficio de la par, como por lo propicios, que
 “estos ultimos años han sido, para conservarlos, y acrecentarlos: lo que se acre-
 “dita tambien por el gran precio que las yervas tienen oy en Estremadura. They
 “pract. de commercia, &c. par Ustariz, p. 21. ch. 11.”

This is entirely exclusive of the sheep that remain always in the plains of Estremadura, &c. which seem to be omitted by him as of no value. If we suppose the fleece of one sheep with another to weigh only two pounds of washed wool, and that that is sold for 2 s. 6 d. per lb. the value of the wool alone will amount to upwards of one million Sterling; an article, it will be allowed, of considerable importance.

perhaps unacquainted with the particular mode of managing sheep in that country, I shall endeavour briefly to give you some idea of it.

In Spain it is not so customary to meet with small detached parcels of sheep, the property of private individuals, as in other parts of Europe. While they belonged to the crown, they were divided into large flocks, consisting of ten or twelve thousand each. Every such flock was governed by one chief shepherd, who had under him others of an inferior degree, who likewise had others under their command, in a regular gradation, as in the army. And like the army likewise they had power to punish trespasses among themselves, without being amenable to any other court. And as the sheep were disposed of in whole flocks, they could only become the property of great men, who keep them still entire; so that the same laws and customs still prevail with respect to these as formerly. The flocks are nearly of the same size as of old; and the same *hierarchy* of shepherds is still continued.

These large flocks of sheep have each, by law, a privilege of pasturage in certain districts of the mountains in summer, and on particular parts of the low countries in winter, upon paying to the proprietors of the ground a fixed price per head for that privilege. On this account they are obliged to travel regularly in the spring of the year from the low countries of Estramadura, Andalusia, &c. towards the mountains of Leon and Asturias, where they feed till autumn; and then, setting out in a contrary direction, they as regularly return to inhabit the plains during the winter season: thus making twice a-year a journey of several hundred miles; the inhabitants of the countries through which they pass, being obliged, at the proper seasons, to leave openings in

in their vineyards, &c. sufficient to give them a free passage without molestation.

This mode of management, although it may appear to us a little singular and unaccountable, has evidently been suggested to them by motives of convenience alone, and not from any capricious fancies on the one hand, nor on the other hand from any premeditated design of improving their wool. For as the mountains are covered with snow during many months in winter, when the vallies enjoy an agreeable temperature of climate, the sheep, having had at that season no food in the mountains, while they could gather abundance in the low countries without doing any damage to the summer-crop, were sent to the vallies to reap the advantage of it: and in summer, when the low ground is covered with a crop, or parched up with the violent heats in these southern climates, they ascend to the mountains, and eat the fresh herbage that grows upon them at that season; which they could not get at in winter*.

And as this practice was established by the influence of the crown, as the country was gradually recovered from the Moors, before individuals had acquired an idea of that stability with respect to private property that now so universally prevails in Europe, it continues still to be practised there; which gives to Spain one advantage in point of political œconomy over every o-

* A practice exactly similar in kind to that in Spain, and for the same reasons, takes place in some parts of the provinces of Roussillon and Languedoc in France, where the sheep are driven every winter from the plains of *Reveral* and *Salanque* to the neighbouring mountains of *Aspres* and the high *Conflant*; and from the *Clape de Narbonnes*, and the basset *Corbieres*, in Languedoc, to the mountains of *Cevenne*, and *Gevaudon*. But as the flocks are less numerous than in Spain, and more intermixed with one another,—the wool is not improved to an equal degree,—although the best wool of Roussillon is reckoned finer than the inferior sorts of Spanish wool.

ther country in Europe, who might in vain now attempt to render a practice of this sort so universally prevalent as it is there already.

This practice has been attended with greater advantages to the state than the inhabitants have been aware of; as it has been, in all probability, the principal mean of preserving the wool of that country so long of such a fine quality; and of securing to it almost the only beneficial branch of commerce that they now follow. For as the sheep are always kept upon the cold mountains in summer, they never experience a degree of heat near so great as what is felt even in this island during that season of the year; and prodigiously less than in the vallies of any other country in Europe: which tends very much to give to their wool a superior degree of closeness and fineness.

By this practice, likewise, their flocks being carefully kept from intermixing with one another, especially at the rutting-season, when they are in the mountains at a great distance from every other kind of sheep, the original breed is more effectually preserved from being debased by any of the bastard sort, than could possibly be effected in any country where property is more divided, and flocks of different kinds more intermixed with one another.

And if to these particulars we add, that the wool in Spain is almost the only article that brings any money to the owner of a flock, and that by consequence it must become a principal object of his attention to prevent it from degenerating, we shall not be surpris'd that this country has so long preserved a superiority over the neighbouring states in this respect; who have neither
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such conveniencies for pasturage,— such means of preserving their race of sheep distinct from one another, nor such temptations to bestow their whole attention to the improving of their wool; as the carcase, in many cases, becomes an object of greater importance than the fleece.

That the wool of Spain would quickly become of as bad a quality as in other warm climates, were the sheep allowed to remain in the vallies during the summer-season, seems to be clearly demonstrated by this circumstance, that in the provinces of Andalusia and Estramadura there are some individuals who keep a few sheep for their own use, which remain in these warm places throughout the whole season, whose fleeces, instead of being fine and silky like the others, are hard and coarse, more nearly resembling some kinds of hair than fine wool.

But that these regular perambulations of the sheep in Spain contribute in a very high degree towards the improvement of their wool, and that a temporary heat during the summer-season tends much to debase it, may be easily perceived by any one who will take the trouble to examine a fleece of wool of our own produce, which has been allowed to grow till it has attained its whole length; as he will immediately perceive, that the out-side, or that part of the fleece that grew upon the sheep during the summer-season, is much coarser than the in-side of the fleece, that has been produced during the cold weather of winter: for, let him pull out any single filament of the wool, and he will find, that the end which adhered to the sheep is not in some cases perhaps one fourth part of the thickness of the other end.

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This is a fact that all wool-sorters are well acquainted with, although few persons seem to have given themselves any trouble to discover the cause of it. But as it will afford us more light in endeavouring to discover the nature of the wool produced in different countries, with the means they may have of improving the same, and consequently their fitness or the reverse for carrying on an extensive woollen manufacture with their own materials, than any other fact that I have hitherto met with, it is of great importance to examine it with all possible degrees of cautious circumspection. For as nothing can be a greater defect in the quality of wool, than this inequality in the size of different parts of the same filament; it being impossible in this case by any kind of sorting to separate the coarse from the fine, which must always prevent it from working kindly in any manufacture whatever; those nations which must of necessity be condemned to have all their wool with this defect in a high degree, will never be able to cope with another nation in the woollen manufacture, which is not subjected to this inconvenience.

On this account I hope you will not think it impertinent, if I here relate, with a very scrupulous degree of precision, several observations that have occurred to myself, and experiments I have made, with regard to this subject; from which I hope you will with me be convinced, that the cause of this phenomenon needs no longer be esteemed doubtful.

It is some years since I first took notice of the above-mentioned fact; and having often had occasion to converse with people who had never observed it, I was on many occasions induced to show them some wool before they could be satisfied of it; so that I had many opportunities of seeing the experiment verified without ha-

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ving met with one instance in which it failed, or was in the least doubtful.

In the month of June of this present year 1775, I took some filaments of wool from a fleece lately shorn from the sheep, with an intention to show a friend the difference between the fineness of the root end and that of the top; but although there was a perceptible difference between them, yet I was a good deal surpris'd to find that this difference was far less than I had ever observed it before. At first I imagined that my former observations might perhaps have been erroneous, and that what I had imagined to be a general rule was perhaps only a particular exception, arising from some accidental unobserved cause; and therefore, with some degree of eagerness, examined several other fleeces; all of which I found to agree in this particular with the first.

At a loss to account for this singular phenomenon, I continued to reflect upon it for some time; and as I again and again examined with great attention the separate filaments of wool, I could not help remarking that the root-end of the filament was not the finest part of it, as I had till then imagined; but could plainly perceive, that it was sensibly smaller about a fourth or a fifth part of its whole length from the root-end than it was there; so that the whole filament was of unequal thickness in every part, varying in this manner. At the point it was thicker than at any other place, from whence it gradually and slowly diminished for about three fourths of its whole length, from which it began, at first imperceptibly, but gradually more sensibly, to encrease in size as it approached towards the root-end.

This form of the filament soon satisfied me as to the cause of
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the phenomenon that had at first perplexed me, and at the same time afforded a very clear illustration of the great effect that the climate has upon the fineness of the wool. For it was here palpably evident, that that part of the filament that was produced during the summer months, forming the points of the wool, was coarser than that which grew during the cold winter months, so that it gradually grew finer and finer as the rigour of the cold increased, till about the month of February, when the cold is usually most intense in our climate; after which time the weather beginning to grow gradually warmer and warmer, the size of the filament as gradually expanded till the middle or end of May, when it was separated from the body of the sheep.

I was by this experiment furnished with a very satisfactory answer to an objection that had often before been made against the opinion I had entertained, that the cold of the season in which it grew, was the cause of the superior fineness of the roots in comparison of the tops of the wool; it having been often alledged, that it was possible this circumstance might rather be occasioned by the warmth that was produced near the skin of the sheep even during the cold weather, by the length and closeness of the wool so perfectly covering its body at that season. But had this been the case, the fineness must have gradually become greater and greater at the roots as the deepness of the fleece increased, and of consequence the very root of the filament ought to have been the finest part of it.

This phenomenon appeared to tally so exactly with the idea I had preconceived, as to make me be afraid lest I might become the dupe of my own prejudices, which might make me imagine that I actually perceived things, that only existed in my own imagination;

gination ; as has often happened with others in the same circumstances. But to guard against all danger of being imposed upon in this respect, I drew out some of the filaments singly ; and having doubled them in my hand, held out the two ends to a person who knew nothing of my intention in doing it ; and having asked which was smallest, the root-end was invariably made choice of as the smallest.

I then cut the filament at the smallest part of it as above described, and in the same manner presented an end of this smallest part along with that end of the filament that had formerly been the root ; which last was as invariably pitched upon as the coarsest of the two.

These experiments I repeated frequently with five or six different persons, at different times ; none of whom ever committed one mistake in chusing as above specified. From which I was perfectly satisfied, that my own observations had been entirely just ; and that the inference I drew from thence could not be controverted.

It readily then occurred to me, that the smaller difference between the roots and the points of the wool shorn at Whitfunday 1775 than what I had ever before observed, was to be entirely ascribed to the peculiarity of the seasons for the year preceding that. For in this part of Scotland the summer 1774 was the coldest throughout that was ever known in the memory of man ; which ought naturally to have made the points of the wool that grew in that season much smaller than usual. And as the spring 1775 was uncommonly warm, it was not at all surprising, that the difference between the two ends of the filament should be far less

perceptible than usual. I have been told, that the season with you was nearly similar to our own: if so, you will be perhaps able to recollect it.

To satisfy myself, however, experimentally of the difference, in these respects, between the wool of this and the former year, I was at pains to procure some wool of last year's growth; and having compared some of the filaments of it with others of this year 1774-5, the following particulars were observable.

1st, The difference between the point and the root of the filament of wool of crop 1773-4 was much greater than between the two ends of the filament that grew in the year 1774-5: And,

2^{dly}, The difference between the root-end and the smallest part of the filament, was much greater in the wool of crop 1774-5 than in that of the former season. This was perceived and acknowledged by others than myself, as before, to prevent my being deceived.

These phenomena admit of as easy an explanation as the former; being the natural consequences of the two different seasons in which the separate filaments were produced.

For it is probable you may yet be able to recollect, that summer 1773 was very warm and comfortable, and the winter of the same year uncommonly mild; the spring of the year 1774 having been the coldest and most uncomfortable that was almost ever known.

Hence the points of the wool were coarse, and the roots fine, to
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as great a degree as may ever be expected to happen in this climate; and as there was little variation between the temperature of winter 1773-4, and spring 1774, there was likewise little variation between the roots and the finest parts of the filament.

But as the heat of spring 1775 was greater than we almost ever experienced, the roots of the wool of that year's growth were uncommonly coarse, so as to differ much more than usually happens from the smaller parts of the filament produced in winter; which was probably the cause of my remarking it so readily that year, although it had always escaped me before.

I have been thus particular in describing the phenomena observable in comparing the wool of these two different seasons, not only to prevent any mistakes that you might fall into by making your observations on any wool that might fall into your hands, without paying attention to the nature of the season in which it may have been produced; which might make you imagine, the facts had not been by me fairly related, if the appearances should differ in some respects from those I have enumerated, owing to a variation of the season; but also to enable you to repeat these experiments yourself, if you should be so inclined, with pleasure and advantage, instead of perplexity and doubt that might otherwise have distressed you.

To verify these experiments in a still stronger manner, and give the observations a more incontestable degree of certainty, it readily occurred, that if the coarseness of the points of wool is to be ascribed entirely to the heat of the season in which it is produced, there must be a difference between the form of a filament of wool that has grown upon a lamb, and one that has been produced
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upon a shorn sheep. For as the lamb is yeaned in the spring, while the weather is yet cold, if our observations have been just, the points of it ought to be finer than that part of the wool that grows during the warmer weather in summer.

To ascertain this particular, I examined some filaments of wool that had been cut from a lamb on the 15th of August this season 1775, and had the satisfaction to find, that this additional trial tended to confirm all the foregoing observations: for the roots of this wool were sensibly coarser than the points; which is directly the reverse of what invariably happens with regard to the wool of old sheep.—This experiment I also tried as before, by showing the two ends to different persons, none of whom ever committed a mistake.

From this experiment it also follows, that a filament of the wool of a sheep of the first shear, commonly called in England as well as Scotland *bog-sheep*, if it has not been shorn, will always be of a different form from that of a shorn sheep; as it will gradually encrease in size from the point till about a fourth part of its length from thence, after which it will as gradually diminish till within about a fourth of the root-end; when it will begin again to expand till it arrives at the root altogether. On this account it is necessary, if you repeat the experiments, to take care that you do not get a *bog's* fleece instead of a shorn sheep.

These experiments demonstrate in the clearest and most satisfactory manner, that heat at all times tends to render wool coarser in quality, and that cold to a certain degree is indispensably necessary for the production of fine wool; so that the opinion usually entertained on this head is directly the reverse of truth.

A necessary inference that must follow from these premises, if our observations have been just, is, that those countries alone will be capable of producing wool of a very fine quality, which are not only cold upon the whole, but as uniformly so throughout the whole season as possible.

On this account we might expect, that the finest wool could be produced, with least trouble or care, upon the sides of very high mountains in the torrid zone; for as the heat in these latitudes is almost invariably of the same degree throughout the whole year, if the sheep are confined at a sufficient height in the mountains, they will there experience an uniform degree of cold from one end of the year to the other, without farther trouble or care. But small as this degree of trouble is, it has never yet been bestowed: yet, even without this, the sheep that were carried from Spain to the Andes of America, continue to afford in some places there as fine, or perhaps finer wool, than that of old Spain; although they are not there an object of any concern to proprietors, except on account of their carcase.

We would next expect to find wool of the best quality in mild uncultivated countries, where property was unfixed, and the inhabitants accustomed to an ambulatory life; as there they would always vary their habitations as the season required; ascending to the mountains in summer, to enjoy the coolness, and fresh verdure, that these afforded, and retreating to the vallies in winter, that they may shun the rigour of the season themselves, and find abundance of food for their flocks.—Such is exactly the conduct of the inhabitants of Persia, where the fine wool * before mentioned

* Tavernier takes notice in many places of his journal of perambulations of this fort.

mentioned is produced. And although the natives of Spain have for the most part fixed habitations, yet we have seen, that the sheep and their attendants follow the same ambulatory life as in Persia, and these sheep afford wool nearer approaching to that than any other country in Europe.

In northern climates, if property is much divided so as to prevent these extensive perambulations, little fine wool can be expected, except in small islands; and not even in these if they are in very high latitudes: because the heat of summer in northern countries becomes for a short time so intense, as must tend in a powerful manner to alter the quality of their wool in this respect. It is from this cause that the wool of the sheep in Iceland is extremely coarse on the outside of their fleece, while that part which adheres to their bodies is exceeding fine, as is remarked by Busching, vol. i. p. 219. and other natural historians.

For the same reason we may expect, that the wool in Norway, Denmark, Sweden, and other northern continental countries, will be still more subjected to this inconvenience, unless the sheep be carefully driven to the mountains in summer; as the heat is then in these countries extremely intense.—Nor do we find that any fine wool has ever been produced in any of these regions.

We are as yet so little acquainted with the internal state of Tartary, or the nature of things that are produced in it, that we

fort.—“ A quatre lieues (says he, t. i. p. 38.) de la ville (Erevan), vers la midi,
 “ il y a des hautes montagnes, où les paysans qui habitent les pays chaud du cote
 “ de la Chaldée, viennent, jusques au nombre de vingt mille tentes, c’est à dire de
 “ familles, chercher en esté le bon paturage pour leur bétail, et sur le fin de
 “ l’automne ils reprennent leur chemin a leur pays,” &c.

have only room to conjecture what may be their state in this respect. But as the natives lead a wandering life, like many other Asiatic nations, and as the country is mountainous and cold for its latitude, we have reason to think that they might produce wool of a very fine quality. I know not if you will or will not admit the following fact as tending to prove the probability of some of the northern hordes having at present fine wool : but as it is curious, I doubt not but you will be pleased to be informed of it.

When Earl Marischal was last in Scotland, a gentleman of my acquaintance who was on a very intimate footing with him, called on him one morning to breakfast ; when he found his Lordship in his nightgown ; which was lined with a kind of fur that caught the gentleman's attention. When the Earl perceived that he took notice of the fur, he came up to him, and asked if he knew what kind of fur it was : but the gentleman having told him that he had never seen any of that sort before, nor could conjecture to what animal it belonged, his Lordship said, that the gown had been sent to him in a present by his brother Marshal Keith when he was in the Russian service, who had informed him, that the fur with which it was lined was *Siberian lambs skins*. The gentleman was a good deal surpris'd at this account, and examined the fur with attention. It was, he said, of a jetty black colour, and silky softness, exceeding close and warm ; and was in his opinion the most beautiful fur he ever beheld. I give you the story as I had it, and leave you to credit it or not as you shall see proper. I, for my own part, should not be much surpris'd if some of the Tartar hordes, who border on Siberia, and range through all the northern provinces of Asia, should have sheep of that sort, the

skins of which might sometimes find their way through Siberia to Russia *.

But however this may be, it is certain, that the difference between the heat of summer and the cold in winter is far less considerable in Great Britain than in any other country in Europe; which gives this island an undoubted superiority over all the neighbouring nations with regard to rearing of wool: A superiority of which we often vainly boast, but in other respects take little heed how to improve to the utmost: for which we are surely much to blame; as it is hardly to be doubted, that through carelessness the quality of our wool is gradually debasing, while that of our neighbours, by an opposite conduct, is as gradually improving.

Nor is the superiority that we enjoy from our situation so great as to put it out of the power of other rival nations, by a skilful management of their sheep, in time greatly to excel us, if we neglect to take care of ourselves. It behoves, therefore, not only the inhabitants of Scotland, but of England also, to bestir themselves in time, and by a due attention take care to ensure to themselves that superiority in the woollen manufactures which they have long enjoyed; but which, from many untoward cir-

* In confirmation of this opinion, I find that Bushing mentions lambs skins with curled wool, as one of the articles of commerce carried on between the Tartar hordes and the Russians in Siberia, in the following terms.—“The trade to Bugar, or Bochora, which brings in ready money, or, by bartering of goods, *curled lambs skins*, Indian silks, and sometimes gems; which are brought to the yearly fair of Samarkand.” Bush. Geog. vol. 1. p. 391.—But as sheep abound in Siberia, it is not probable that this article would have been mentioned unless they were remarkable for some valuable peculiarity. Probably this may be the very sort with which the gown was lined.

cumstances,

cumstances, does not seem to be at present fixed on such a firm basis as many would fondly wish to persuade themselves it is. England has already reaped great benefits from the wool produced in it; but as Scotland has not yet been in any eminent degree benefited by her wool, it is of importance to discover the causes of it, which I shall endeavour to point out in another letter.——In the the mean time I remain &c.

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P O S T S C R I P T.

SINCE the above letter was written I have continued my experiments on wool, one of which deserves to be here related.

In consequence of the discovery that the wool which grew in cold weather was finer than that which was produced in the warm season, it occurred, that if a sheep should carry such long wool as to admit of being cut twice in one year, there would be a possibility of separating the coarse part of the filament from the fine, which might sometimes be attended with very beneficial consequences.

To try if this could be done with profit, I took two lambs that carried long wool, and on the 12th of August 1775 caused them to be clipped; and having taken a lock of wool exactly from the top of the shoulder of each, marked the lock of wool by a piece of paper, referring to a particular mark put upon each of the lambs, so as that they might be exactly known, and with certainty distinguished from one another in the spring.

In the end of May 1776 these two sheep were again taken, and a lock of wool cut exactly from the same part of the shoulder from whence the former had been cut.—These were compared with the two former locks; when it was found, that the wool which had grown before August 1775, was twice as coarse at least, and much harder and drier, and more apt to fly about in separate filaments when working, than what had grown between August 1775 and May 1776. It was likewise remarkable, that there was
little

little variation in the size of any part of each of these filaments, that which grew in summer being nearly of an equal coarseness in every part, and that which grew in winter being as equally fine.—The winter was not remarkably severe, nor the spring uncommonly hot.—These locks I still preserve, for the inspection of the curious.

From this experiment, besides a confirmation of the general theory above advanced, we may be able to draw some corollaries, that may perhaps be of use in practice.

Cor. 1. Those who have long wool, only fit for combing in its native state, may thus be enabled to obtain wool from their sheep that shall be very proper for carding, as the wool of each cutting is only half its natural length. In the North Highlands of Scotland this practice of clipping their sheep twice a-year is pretty universally followed. Probably it ought to be accompanied with some precautions about shearing-time, to prevent the sheep from catching cold. It is obvious this could never be practised with profit on short-woolled sheep, unless for making hats.

Cor. 2. Those who inhabit a climate that is too hot for producing fine wool in summer, might by this practice obtain fine carding-wool if they were possessed of a breed of fine long-woolled sheep: for by thus separating the coarse from the fine, they would obtain an equality of filament, which it would be impossible for them ever to attain by any wool that grew for the whole season. Hence,

Cor. 3. If ever those who inhabit a country enjoying such a climate, hope to obtain good and fine carding-wool of their own growth,

growth, it must be by importing a breed of long, and not of short woolled sheep, and treating them in this way.

Cor. 4. It appears from the above induction, that although a country having a warm climate, may obtain, by good management, fine carding-wool, it is impossible for them ever to have very fine combing-wool; as the ends of it which grow in summer must always be coarse.

Query. Since long combing-wool can thus be made to afford fine carding-wool, and since a sheep of the same bulk will afford a much more weighty fleece of the first kind than of the last,—Whether would it be more economical, even for those that inhabit a climate that admits of it, to rear sheep that produce only short wool, or to obtain it in the manner above described?

O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R S E V E N T H.

C O N T E N T S.

Disquisitions relating to sheep and wool continued.—Of other circumstances that tend to produce a variation in the quality of the wool of different districts.—There are different varieties of sheep, whose qualities are not accidental, but are transmissible to their posterity.—Buffon's opinion in this respect erroneous,—exemplified as to dogs,—and horses,—and sheep.—Erroneous reasonings that have thus been adopted, pointed out, and refuted.—Consequences that result from this discussion.—Objections answered.



O B S E R V A T I O N S
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N A T I O N A L I N D U S T R Y.

L E T T E R S E V E N T H.

To Mr ***** London.

DEAR SIR,

October 10. 1775.

I HOPE you received mine of the 2d instant, containing many observations on the influence of the climate on the quality of the wool of sheep. Without waiting for your remarks on that letter, I now proceed to take notice of some other particulars relating to sheep, that ought to be examined with candour before we can with certainty determine whether or not Scotland is capable of rearing abundance of fine wool.

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It may probably have occurred to you on reading my last letter, that if a variation in the heat of the climate produces such a sensible change on the quality of the wool as is there alledged, there must undoubtedly be some other circumstances, besides a variation in the climate, that have a powerful influence in that respect; seeing we find a very great difference in the fineness and other qualities of wool produced in different districts, where the difference of climate is but very inconsiderable.

For although we should be disposed to attribute ever so much to the influence of the climate of Great Britain over that of any place on the continent; yet the difference between the heat of the climate of several places in this island that afford wool of very different qualities is but very inconsiderable, if at all perceptible. Lincolnshire seems to enjoy no advantages in this respect over the neighbouring counties of York and Durham. The southern parts of Kent, Suffolk, and Hampshire, are rather warmer than Buckinghamshire. Many parts of England enjoy a climate nearly similar to that of Hereford and Gloucester; yet wool of an equal quality is not to be met with in any other part of England. The mountains in Shropshire enjoy a temperature nearly the same as those of Derby and Northumberland; but the wool that grows on the first is of double the value of that which is produced on the last. In short, there seems to be so little connection between the fineness of the wool that grows in different parts of Britain, and the temperature of the climate of these places, that had we not other proofs which demonstrate in the most satisfactory manner the influence that heat or cold has over the quality of the wool, we should from this circumstance considered singly, be disposed to believe that a difference in point of climate had no effect at all.

There

There seems to be but one way of reconciling these two contrary facts with one another, viz. by supposing that there may be a great many varieties of this species of animals; each of which varieties is endowed with certain peculiar qualities that are transmitted to its progeny, so long as the particular breed is kept pure from any admixture with others.

As you are a professed naturalist, and a great admirer of Mr Buffon's system, you will possibly be disposed at the first to reject this hypothesis with indignation, as unsystematical, being directly contradictory to the opinion of that celebrated naturalist; yet I am not in the least afraid that you will differ in opinion from me as to this particular, after you have considered it with an equal degree of attention as I have done. Buffon, you know, my good Sir, with all his talents, is but a man; and a man as liable to be hurried away into the regions of fancy by the vivacity of his own ideas, and the bewitching seductions of a spirit for *system* as almost any other man whatever.

It seems probable, that every species of animals which inhabit this globe, admits of many permanent *varieties* *, each of which possesses certain qualities in a more eminent degree than other varieties of the same species, which may be transmitted to their descendants to the end of time, if they be kept from intermixing with other varieties of the same species. But as nature hath pla-

* As naturalists have not yet taken much notice of the peculiar distinction of animals mentioned in the text, I am at some loss for a proper term by which to express it. In botany the term *varieties* is employed to denote something of this kind—with regard to animals; in the language of the farmer these variations are sometimes called *breeds*. I here use this term, or *varieties*, as synonymous, for want of a more proper word than either of them.

ced no barrier to prevent the intercopulation of these varieties with one another, where-ever these have free access to each other, the original distinguishing qualities of the parents will be soon confounded in the descendents by this promiscuous copulation.

But from the natural indolence of mind to which mankind are so universally subjected, we have hardly hitherto distinguished with any degree of accuracy, the varieties that take place in this respect among any class of animals, unless it be dogs, horses, and cocks.

The dog, from his peculiar attachment to man, has become such a favourite domestic as to experience a more particular share of his attention than any other animal whatever. He partakes with man in his ordinary food in every part of the globe; and as he lives more immediately under his master's eye at all times than any other creature, it was impossible for him not to remark the different distinguishing properties for which the several varieties were peculiarly remarkable. And as the qualities which distinguished the several breeds of dogs did on many occasions become subservient to the pleasure or conveniency of man, he was naturally induced to try if these could be transmitted to their posterity in full perfection, by keeping the breed distinct from others. And in consequence of many experiments that have been thus made, he has been enabled to perceive with certainty, that the several varieties of this class of animals are possessed of peculiar natural talents which are permanent; insomuch that any particular breed may be kept quite distinct from any other breed for ever, if care be taken always to prevent them from intermixing with one another at the time of copulation.

And

And although it be true, that certain climates produce peculiar changes on the temperament of this class of animals ; yet, as these changes equally affect the whole species, it has not the smallest tendency to transmute one variety into another, as Buffon supposes. On some parts of the coasts of Africa dogs of any kind in a short time lose the power of barking ; but every kind of dog experiences this metamorphosis.—In warm climates the hair of all dogs is thinner than it would be in colder regions ; but every variety of the species experiences a similar change in this particular. The Spanish pointer bred in Britain with proper care, possesses the same kind of instinct with its parent breed, and never could acquire any of the qualities of the beagle, but by intermixing with some of that species.—The small Italian and large shaggy greyhound may be kept distinct from one another for ages about the same family. Nor is there any instance of a spaniel, a shepherd's dog, or a greyhound, producing a bull-dog, mastiff, or any other species but their own, unless where they had access to dogs of that kind ; in which case a mongrel breed would infallibly be produced *.

* I cannot help here pointing out another error of Mr Buffon, nearly connected with the subject here treated of. He maintains, that sheep and goats are of the same species, and readily intercopulate with one another ; and that this progeny is not of the infertile *hybridic* sort, but only a mongrel breed that are capable of producing others ; and that, after a few generations, this kind of animal becomes a sheep in every sense of the word, and carries as fine wool as the parent-sheep. Where he met with the facts that tend to establish this opinion, I know not ; but it is well known, that although sheep and goats are kept promiscuously at all seasons of the year in the Highlands of Scotland, there are no instances to be found of their intercopulating ; nor is there ever there found any mongrel animal of this kind. The horse and the ass are by him allowed to be distinct species ; yet there are instances of mules being produced without the interposition of man. From whence it would seem, that there is a much greater natural reluctance between the sheep and goat, than between the mare and the ass ; as it is universally allowed, that the he-goat is the most salacious animal that is known.

It

It would surely be necessary to ask your pardon for dwelling so long on a particular so obvious to every one who will think upon it for one moment seriously, did not the deference that is justly due to a philosopher of so much eminence plead my excuse. I forbear to enter into any formal refutation of his assertions on this head, as you cannot but perceive their futility at the first glance, after being thus put upon your guard *.

Something

* To such as are not acquainted with Mr Buffon's system, it may be necessary to be somewhat more particular. I shall endeavour to give an idea of his hypothesis on this subject as briefly as possible.

The shepherd's dog Mr Buffon considers as the parent-stock from which all the different varieties have been produced, by a change of climate, education, food, and other circumstances. "This animal (he observes) still continues pretty nearly in its original state among the poor in temperate climates. Being transported into colder regions, he becomes smaller, as among the Laplanders; but becomes more perfect in Iceland, Russia, and Siberia, where the climate is less rigorous, and the people more civilized."—But if there is a difference in the dogs of these countries, it can scarcely be owing to the cause assigned, as the climate of Lapland is as mild as that of Siberia, and the inhabitants perhaps more civilized.

"The shepherd's dog, (he farther observes), if transported to temperate climates, and among people entirely civilized, such as England, France, or Germany, becomes divested of his savage air, his pricked ears, his long thick hair, and from the influence of climate and education will become a bull-dog, a mastiff, a beagle, or a hound."—But if this were the case, whence should it happen that we in Britain have the race of shepherds dogs in as great perfection as any where else, and the mastiff, bull-dog, hound, &c. in equal perfection; and can preserve the breeds of each of these kinds as distinct from one another, as if they had been bred in the most distant corners of the earth?

"The hound, the tarrier, and small-spotted setting-dog, he considers as of the same family; and asserts, that they are often all produced at the same litter, although the bitch should have been covered with only one kind of dog."—I ask at the reader, if ever he knew a single instance where this happened?

"The hound, (he farther observes), if transported into Spain or Barbary, where the hair of all animals becomes soft and long, will be converted into the land and

"water

Something of the same kind has been observed with regard to horses; but, from the greater difficulty in making the necessary experiments on them, and the less obvious distinctions with regard

“water spaniel;—and when these are again brought back to Britain,” instead of returning to their former state of a hound, “they become the small shaggy dog.”—But who does not know, that spaniels continue to be bred in Britain for ages without degenerating in the smallest degree?

We have seen above, that the mastiff, bull-dog, beagle, and hound, to which may be added the tarrier and small setting-dog, are all produced in Britain from the shepherd’s dog transported from cold climates.—“But this mastiff dog, (he observes), when carried to the north,” deserts his original family, and “becomes the large Danish dog;—and when transported to the south, becomes a greyhound. The same transported into Ireland, the Ukrain, Tartary, Epirus, and Albania, becomes the great wolf dog, known by the name of the *Irish dog*, “which is the largest of all dogs.” Thus he makes the shepherd’s dog, when transported from the north to Britain, become a mastiff; and that again, when remanded back to the north, instead of returning to its original state of a shepherd’s dog, becomes a large Danish dog;—which again brought back to Britain, its original country, instead of a mastiff, becomes a greyhound; which, by another change of climate, scarce perceptible, is metamorphosed into the large Irish dog.—These surprising transformations might figure very well in Ovid, but do not tally quite so well with the character of a philosophic natural historian.

“The bull-dog, (he farther goes on), when transported into Denmark, becomes the little Danish dog; and this little Danish dog, sent into warm climates, becomes the Turkish dog without hair.”—In the last paragraph, we saw the mastiff in a northern climate encrease in size, and become the large Danish dog:—here his brother the bull-dog, by a like change of place, dwindles into the small Danish dog.—How it should happen, that the same change of climate should produce changes so diametrically opposite, remains to be explained.—When this little Danish dog, however, is sent back to milder climates again, he does not recover his former size, or grow larger, like the mastiff; but by another metamorphosis, altogether as extraordinary, becomes the naked Turkish dog.—The hound, the full brother of this mastiff, we saw on a former occasion, when carried to the warm coast of Barbary, got a coat of longer hair, and became a spaniel.

I might proceed at this rate, for pages, and expose the absurdity of almost every position

gard to the qualities of each different breed of these, our ideas, as to this particular relating to them, are far less certain and definite than with respect to dogs. Yet the connoisseur can point out with clearness and accuracy many unequivocal marks of distinction between the horses of Barbary, Spain, Arabia, Persia, Turkey, Hungary, Poland, Denmark, Sweden, &c. And any man who has travelled ever so little from home in his own native country, can hardly have failed to observe, that the horses in almost every particular district, differ from those of other districts in some very distinguishable respects; although he is but too apt heedlessly to ascribe almost the whole of this to the different nature of the soil, pasture, &c. in different places, rather than to any influence produced from a variation in the original stamina of the parent-animal. And although every one must have had innumerable instances of observing, that horses which have been brought from one part of the country to another, continue to thrive there equally well as at home, and to possess all the qualities for which that breed were remarkable, in as high perfection as if they had still remained there; yet the favourite idea he had been made to adopt in his infancy too often prevails, and makes his experience avail nothing in correcting this vulgar error.

But if these illiberal ideas prevail very universally as to this fa-

position he assumes; for it is perhaps scarce possible to meet with such a bundle of contradictions, founded upon crude and indigested general analogies, crowded into such a small compass.—But it is painful for an ingenuous mind thus to be obliged to expose the accidental weaknesses of a man of real original genius, led astray by an unreasonable fondness for *systematizing*. Such reveries from almost any other man could have required no sort of answer:—as coming from him, they require to be pointed out, and treated with some degree of seriousness.

voured and more domestic animal, in spite of the daily experience of those who breed running horses to the contrary, much more may we expect that they should take place with respect to sheep, an animal, which, on account of its inability to travel, has little chance of being carried far from home, and on account of its mode of life, so nearly approaching to that of wild animals, hardly admits of being so narrowly observed in the rutting-season, as to prevent any individual of that species from intermixing with any others that may chance to be in the country around it, and of thus having its original distinguishing qualities much altered in its progeny, if it should be carried to a part of the country where a different variety prevails !

I have heard it sometimes asserted, that a man had better not reason at all, than content himself with a superficial and imperfect induction of facts upon which his reasoning is founded. Perhaps the assertion is rather bold ; but it is certain, that many errors are thus introduced into arts and sciences, and continue long to infest them with their baneful influences, which never would have been tolerated, had it not been for the specious appearance of reason with which they were at first established. An example of this sort occurs in the present case, which it is of importance to explain.

As many of the varieties of this species of animal are so distinctly marked, and obviously different from many others, there are few who can deny, that there is a very great difference between the qualities of the sheep that are bred in different districts. But as it has been remarked, that if a small number of sheep are introduced into a district where there is a breed differing from these in any respect, the descendents of these strange sheep, after a few

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generations,

generations, cannot be distinguished from the original breed of sheep in the country, it has been concluded, with some appearance of reason, that the soil or climate of that particular district were best calculated to rear the sheep that were originally found in it; and that if any other sort should be introduced into it, the influence of these circumstances would be so powerful as to bring them in a short time to be of the same kind with their native sheep.

This opinion being once firmly established, the necessary consequence must be, that the inhabitants of each district will become entirely satisfied, that their own breed of sheep is better fitted for their soil and situation than any other breed whatever; and that if these are of a kind peculiarly excellent, there is no danger of hurting them essentially by the intermixing among them others of an inferior sort; and if they are of a bad kind, there is as little hope of improving them by introducing some of a better breed among them. For although it should be allowed, that there is *some* change produced upon their flocks when any different sort is *first* introduced among them; yet as this is imagined not to be of a permanent nature, it is apprehended that neither benefit nor hurt can accrue to either district, but by continuing perpetually to introduce great numbers of sheep of a sort different from their own; which could not be done but at such an expence as gives no room to hope for any considerable profit, or be apprehensive of any important loss from this cause. Thus both parties sit down contented with their situation, neither of them improving to the utmost the real advantages that they may be possessed of.

But as this reasoning rests entirely upon an assumed fact, which more accurate observations prove to be directly the reverse of
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what has been supposed, nothing can be more erroneous than the conclusion that has been drawn from it. For although it seems hardly to admit of any doubt, that every distinct breed of sheep, as well as every variety of the *canine* species, may be kept for any length of time without degenerating into another kind, in any part of Britain, if its blood be kept from being contaminated by the admixture with any other breed; yet so invariably does every particular species propagate its kind, and communicate its own peculiar qualities to its descendants, that if any one species be mixed with any other, the progeny will invariably be a mongrel breed, participating alike of the qualities both of the father and mother.

Hence it happens, that when a small number of strange sheep come into any district where there are others differing in any respect from themselves, as it is impossible, by any ordinary care, to keep them from intermixing with the native sheep at the rutting-season, their progeny necessarily approach one step towards the nature of the sheep with which they are intermixed. And as these their descendants run the same risk of being farther debased than their parents were, it must of consequence follow, that, after a few generations, they will have so far lost their original marks, as scarce to be distinguishable from the sheep with which they are now associated. And although these strange sheep must communicate some part of their properties to their descendants, which will alter in some degree the qualities of the original breed of the country; yet this in time becomes so much divided, and bears such a small proportion to the whole, as to produce hardly any sensible effect, unless the experiment should be very often repeated.

To this cause, rather than the change of climate and pasture, must we attribute the little success that has attended numberless trials which are said to have been made to improve the breed of sheep in some particular districts: and to this cause likewise must we ascribe that permanency of the qualities observable in the breed of sheep in many districts of the country.

Thus in Norfolk they have possessed, from the earliest period of which we have any records, a breed of sheep, remarkable, among other particulars, for having black faces; which continue undiluted to this day; while in the neighbouring county of Lincoln they always had, and still have, another sort, distinguishable by many other particulars besides the shining whiteness of their faces. And although it must have happened, that a few white-faced sheep have been at different times brought into Norfolk; yet by their speedy admixture with the others, the race has been quickly debased, so as that it has been impossible to distinguish them from the original breed of the country.—In the same manner, if a black-faced sheep should accidentally have come into Lincolnshire, its descendants would quickly lose this distinguishable peculiarity, and become in a few generations in no respect different from the other sheep of the county; so that the particular breed of each county continues still distinct from the other, notwithstanding these casual mixtures of different sorts from time to time.

That the difference in this respect must be ascribed to the cause here assigned, and not the former, seems to be evident; seeing there is so little difference between the climate of these two counties as to be hardly perceptible. And the pastures of each are so nearly alike, that no one who thinks seriously on the subject can be

be in good earnest persuaded, that this great difference in the nature of the sheep of each district, and the change that happens upon their being carried from the one to the other, can be produced by these causes.

But what proves beyond a possibility of doubt, that these changes are occasioned merely by a mixture of blood, and not from any change of climate or pasture, is, that the original sheep brought into either of these places, continue to retain all their distinguishable qualities during their whole life, in as great perfection as if they had always continued in their own native district: the changes specified above being only observed to take place with regard to the sheep that are their descendants. There never was an instance known of a sheep that had once been black-faced becoming white-faced, nor *vice versa*.

If these observations, together with the fact related in my fourth letter, p. 73, 4. were not sufficient to afford entire satisfaction as to this particular, I would refer you to the experience of almost every individual who has ever been possessed of sheep for a confirmation of it. And if you yourself attend to it, you can hardly fail to meet with incontestable proofs of it in the few expeditions that you take to the country. For where-ever you meet with a flock of sheep in which you perceive different kinds, you will always find that the lamb participates a good deal of the nature of the mother, so that there will be as many different kinds of lambs in the flock as there has been of ewes, although there has been but one ram for the whole. This I myself know experimentally: for as I have had in my own flock for some time past sheep of three different kinds, easily distinguishable from one another by the different lengths of their wool, and manner of its growing, as well as by the particular

cular make and carriage of each sort, although not by the colour of their faces, I could venture to pick out all the lambs of each particular breed without seeing any of their mothers; and could in some cases distinguish a mixture of the blood of one sort with another, even to the third or fourth generation. Nor is it difficult for one who bestows attention upon these matters, to distinguish with a considerable degree of accuracy the lambs of each particular ram in his flock, if these are not exactly of the same kind. Neither of which could be done, were it not that the descendants invariably partake of the shape and quality of wool of their parents.

It will readily, however, occur to you, that those who have not been accustomed to view this animal with a critical familiarity, will find it impossible to repeat this experiment with the same facility, as another who has been long accustomed to examine this species of animals with attention. For the experienced sheep-breeder will perceive, at the first glance of his eye, a sensible difference between two sheep which appear to be in every respect the same to another person ignorant of these matters, in the same manner as a sailor perceives a sensible difference between every ship he meets with and any other, when a land-man thinks they are all alike. This I only hint to you, lest you might be disappointed in trying this experiment.

I have been at great pains to ascertain this fact; as it is a fundamental one in leading to a proper plan for improving the breed of sheep in any particular district, while, at the same time it explains in the most satisfactory manner*, the causes of those other-
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* As some time has intervened since writing the above, I have had occasion to
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wife unaccountable variations we meet with in this respect. For where-ever chance has established a breed of sheep that have been remarkable for any valuable quality, they have there encreased; and their descendents have continued to possess the same qualities in a lesser or greater degree, according to the attention of the owner, or the favourable nature of the place. And, in like manner, those places that have got a bad breed of sheep at first, continue still to feel the inconveniencies arising from thence, unless they have been at pains to correct it by a more than ordinary degree of care.

Thus Lincolnshire, Cotswold, and Leominster, have each of them been blessed originally with a good breed of sheep, although differing from one another in many particulars; and their progeny continue to have the same qualities in kind, for which they were at first remarkable: while many other parts of England and Scotland that are equally well fitted for producing fine wool, having never been possessed of such a valuable kind of sheep, have

make many observations, all of which tend to prove, that every variety of any kind of animals retains its own peculiar qualities without alteration, if care be taken to keep them from copulating with other varieties of the same species. Some of the proofs of this matter that have occurred have been curious enough; one of them is so singularly striking that I cannot help taking notice of it here. Those who keep game-cocks are well aware of the necessity of preserving the genuine breed unadulterated by any spurious mixture, but other varieties of this tribe of animals have been much disregarded, except by some curious persons who take delight in rearing and feeding them. A lady of my acquaintance of this cast, having accidentally met with a breed of fowls that had no tail, got a cock of that kind, which soon produced a motley breed with her former hens, part wanting and part having tails, though thinner than usual. One in particular had the feathers on one side of the tail complete, but not the least mark of a feather in the other side of it.

never

never yet been able to equal the places mentioned immediately before, in this respect. But as we are now acquainted with the causes of our failure, and may be sensible of the way to obviate them, let us not despair of being able to succeed in our attempts at improving our breed of sheep, if we act with judgement and discretion.

To point out some other circumstances necessary to be attended to in making this attempt, will furnish matter for another letter. But before I conclude this, I shall obviate one objection that may perhaps occur to you in reflecting on what has been already said relating to sheep.

It may perhaps appear a little difficult, to reconcile what has been said in this letter about the permanency of the qualities of different breeds of sheep, with what had been formerly demonstrated as to the great influence that the climate has over the fineness of the wool.

But if it be considered, that the heat or cold of the climate produces invariably an alteration on the fineness of the wool of sheep exactly proportioned to its degree, whether the wool produced upon the sheep has been originally fine or coarse, we shall easily perceive, that it can have no tendency to affect the permanency of the qualities that the different breeds of sheep are possessed of.

For let us suppose, that in two districts which enjoy a like temperature of climate, there should be found two breeds of sheep, one of which afforded wool of a very coarse quality, while the other afforded very fine wool:—If these two different breeds of sheep were carried both to any other climate either warmer or colder than the former, the wool of both kinds of sheep would be-

come coarser or finer, in proportion to the change of climate: but they would become equally so changed; so that there would still remain the same difference between the two breeds as if they had never been transported from their native country: and if they were brought back again, each of them would afford wool of the same quality as if they had continued always in the same place. Thus it appears, that although the wool may be sensibly affected by the degree of heat or cold that the animal may suffer for the time, yet the stamina of the creature may be said to remain the same, and the peculiar qualities of each breed to be unalterable by this means.

But if two breeds of sheep should be found which afforded wool of the same degree of fineness, although one of them inhabited a warm climate and the other a cold one, we should form a very erroneous judgement, if we imagined that they had been originally of the same kind, and therefore are of equal value. For should these two kinds be both transported into a country enjoying a temperature of climate between the two extremes they formerly inhabited, the wool of the one would become finer than before, while that of the other would be coarser. Or should they mutually change places with one another, their wool, instead of continuing of an equal degree of fineness, as at first, would soon become exceedingly unlike; that of the sheep which originally inhabited the warmer climate becoming extremely fine, while that of the other would grow coarser in an equal degree. These two breeds, therefore, instead of being essentially the same, as they appeared at first sight, are exceedingly different from one another, although in dissimilar circumstances they appeared the same.

From these observations we may be enabled to draw one useful

ful corollary, viz. That in our attempts to improve the fineness of our wool, it will be always necessary to chuse the fine-wooled sheep from a warmer climate than our own. For if, in their native country, they produced wool of an equal or finer quality than our own, it will be so far bettered by the change of place, as to be an essential improvement. But if we were to bring sheep from a colder climate, it would so far degenerate, as to be no improvement at all, unless it happened to be exceedingly finer than our own.

This seems to give some probability to the story told by Columella, who says, that his uncle Marcus Columella introduced some rams from Barbary, which helped greatly to improve the quality of the wool of Spain. The same experiment is said to have been repeated with more success by Don Pedro IV. King of Castile; in which he was followed by the great Cardinal Ximenes *, who thus is said to have secured to his country the pre-eminence in that respect for which they have been since that time so justly famous. For although the wool of Spain was much valued by the Romans, yet we learn from Pliny, that this was chiefly on account of a brown colour that was natural to it; the Romans not being well acquainted with the art of dying wool. And although the African wool is at present inferior to that of Spain, yet as the mountains of Leon are much colder than those of Africa, it is possible they may be originally descended from the same stock.

But not to detain you longer on these circumstances, which are at best but conjectural, I shall descend to the regions of sober *certainty*, by assuring you that I ever am, with the most sincere regard, your very affectionate humble servant.

* I quote the whole of this story from M. Carlier, who does not seem on many occasions a very accurate historian. See *Traité des bêtes à laine*, p. 13.

O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R E I G H T H.

C O N T E N T S.

Disquisitions relating to sheep and wool continued.——Sheep that carry fine wool not necessarily less hardy than others.——Sheep bearing fine wool do not necessarily afford less weighty fleeces than those that carry coarse wool.——Long wool not necessarily coarser than short wool.——Large-sized sheep not necessarily less hardy than those that are of a smaller size.——Every valuable quality or hurtful peculiarity of sheep may be united with any other quality in the same animal.——Consequences that result from thence.——An encomium on Mr Bakewell.——Cautions with regard to his breed of sheep.——Sheep of a moderate size more proper for Scotland in general than a large breed — and why.——Circumstances in which the large breed ought to be preferred.——The woollen manufacture having been neglected in Scotland, little care has been taken to prevent the quality of our wool from growing worse.——Disquisitions relating to the practice of smearing or laying sheep:—Proved to be a useless,—expensive,—and hurtful practice.



O B S E R V A T I O N S
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N A T I O N A L I N D U S T R Y.

L E T T E R E I G H T H.

To Mr ***** London.

DEAR SIR,

October 16. 1775.

BY comparing together the several observations that have been already made in this series of letters, I make no doubt but you will be very well satisfied, that if Scotland has not hitherto produced such fine wool as some other parts of Europe, it has neither been owing to the coldness of its climate nor the badness of its pastures. But as I purpose to make a more particular survey of this part of our island in these respects, after having fully enquired

quired into the nature and peculiarities of the different kinds of sheep, and examined the various popular opinions that prevail with respect to them, I now proceed to the discussion of such of these as have not hitherto been taken notice of.

Many who are fully satisfied that there are different breeds of sheep, whose distinguishing properties might be transmitted to their progeny, for any length of time, if kept from intermixing with others, would still be extremely averse to any proposal that might be made for improving the quality of the wool of any particular district, by introducing into it a breed of finer-wooled sheep than they had formerly possessed: because, say they, these fine-wooled sheep being of a more tender and delicate constitution than such as carry wool of a coarser quality, the farmer would lose more by the additional care that these would require, than he would gain by the additional price he might get for his wool.

But, with all due deference to the judgement of those who may maintain this opinion, it may be allowed me to ask, if they have ever met with any satisfactory proof that they are not mistaken with regard to the supposed fact from which they draw their conclusion. For my own part, I think there is great reason to believe, that it rests upon no better foundation, than that general bias we always feel in our mind, to associate the idea of fineness of quality, in any organized substance, with that of weakness and delicacy in the subject that produces it. But when we look around us for facts to corroborate this idea, we meet with none that tend to support it.

We have no reason to believe, that the sheep in those parts of
England

England that produce the finest wool, are in any respect less hardy than those that yield wool of the coarsest quality. They live in a climate equally severe as the others,—are not in any respect more carefully tended, nor are more subjected to diseases of any sort than these are.

And with regard to the flock mentioned p. which consisted alike of these two kinds of sheep, and were in every respect managed in the same way during the whole time that they continued together; it was observed, that the fine-wooled sort increased more, and were at all times in as good plight, and subject to as few diseases or accidents of any sort, as the coarse-wooled sheep that were kept along with them.

The same thing I have also remarked with regard to my own flock; in which there are some sheep that carry wool of the very coarsest quality, which are in general of a much more weakly constitution, and liable to more disasters, than others that carry wool of four times its value *.

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* Mr Carlier, speaking of the sheep of Bretagne, observes, that near *Landerau*,
 “ Le bétail blanc y est à si bas prix, qu’on vend les moutons non à la paire, mais
 “ à la douzaine. La chair en est dure, & la laine mauvaise. Cette raison fait
 “ qu’on néglige d’en élever autant que les pâturages pourroient en nourrir. —
 “ Nous sommes certains que les pâturages des lieux dont il s’agit ne sont pas de
 “ fine condition, que ceux de cent autres endroits, où les metayers & les menagers
 “ se trouvent bien de cultiver cette partie de l’économie rurale. Les propriétaires
 “ se plaignent beaucoup des maladies, comme d’un sujet de découragement.” p. 685.
 Here is a bad, and tender, and worthless breed of sheep in every respect, carrying coarse wool.

Mr Hastfer, a Swedish author, who has written a judicious treatise on sheep,
 which

I do not however mean from this to infer, that sheep which carry fine wool are *always*, and *necessarily*, of a more hardy sort than those that yield coarser fleeces; but think, I may, without hesitation, venture to place the contrary opinion under the class of *vulgar errors*, which have been heedlessly adopted without sufficient foundation.

To the same class likewise must we refer that opinion which supposes, that a fleece of fine wool always weighs less than one of coarse wool, from a sheep of the same size: for, from repeated experience I can safely aver, that this is not the case. My own experience, would rather make me encline to the contrary opinion; as the finest-wooled sheep in my flock yield the weightiest fleeces from sheep of the same size. But neither would I venture to affirm that this is always the case; as I rather believe it is in some cases the one way, and in others the reverse. A French author who has bestowed much attention upon this subject, remarks,—that the wool of the breed of fine-wooled sheep in the *Barrais de Champagne* is closer, and the fleece more weighty, than that of the coarse-wooled sheep of the same district; which is the reverse in

which has been translated into French, confirms the same opinion by the following observations.

“ L’expérience (says he, preface p. 38.) m’a appris, que les brebis étrangères, pourvu qu’on les soigne bien, prospèrent beaucoup mieux chez nous que les nôtres, qui ont pourtant le peau plus grossière.”

And again, “ L’agneau d’un belier de Flandre & d’un mère Française, ne devient guères plus grand que le commune espèce en France; ils portent cependant le double de laine & beaucoup plus fine, quoiqu’ils n’aient que le même pâturage qu’ont les autres.” *Manière d’élever les bêtes à laine par Hastfer*, p. 41.

And again, p. 56. “ Moins l’espèce est bonne, moins elles pourront supporter le froid; au contraire, plus l’espèce est fine, plus elles y résisteront long-tems.”

Normandy, where a fleece of the fine-wooled sheep of that district weighs a third less than one of the coarse-wooled sheep of that county. *Traité des bêtes à laine, par M. Carlier, 4to, p. 784.*

It is also a common opinion, that the longer the wool is, the coarser is its quality. And you will frequently meet with persons who judge dogmatically of the coarseness of the staple of the wool from the length of it. But this opinion is equally ill founded as the former. I myself have had wool very near half a yard in length; the filaments of which were so fine, that many persons, who were not very great judges indeed of this matter, thought equally fine as some Spanish wool with which it was compared; while other sheep of the same flock gave me wool that hardly exceeded an inch in length, which was at the same time as coarse as dog's hair. The wool of the Cornish sheep is not of half the length of staple as the finest Lincolnshire wool; but it is of such a bad quality as to obtain universally the name of *Cornish hair* *.

Neither, however, would I from this infer, that long wool is always of a finer staple than short; for I have likewise had long wool of a very coarse quality, and short wool very fine. It is enough if we rest satisfied that the fineness of the staple of the wool is in no wise connected with the length of it; although it is not disputed, that those parts of the fleece are usually coarsest

* La laine Eiderstadienne (says Mr Haefser), est à la vérité plus fine que l'Allemande; mais elle l'est moins que l'Angloise; & pour la longueur elle n'approche ni de l'Allemande, ni de l'Angloise, ni de l'Espagnole, p. 52.

Here the particular wool, that he calls *laine Eiderstadienne*, is finer, and at the same time shorter, than the German wool.—It is coarser than the English wool though shorter.—It is even shorter than the Spanish wool, though it must be coarser by many degrees than it, seeing it is even inferior to the English.

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which are of the greatest length ; the buttocks being for the most part longer and coarser than the sides ; the observing of which might probably have given rise to that opinion. But those who are sufficiently careful of their breed of sheep, may soon render the difference in this respect far less considerable than it usually is found to be at present *.

It is likewise a prevailing opinion, that large-sized sheep are less hardy than those that are of a smaller sort : An opinion which, if taken in the same general and unlimited sense as the former, probably is as little just as these are. It will not be disputed, that a large-sized sheep requires a greater *quantity* of food than one of a smaller sort. But that it either requires it of a richer quality, or in greater quantity in proportion to its own bulk, appears to me extremely doubtful. For although I have had both sorts in my own flock for some years past ; and though these have been always fed upon the same pastures, and treated in every respect alike ; yet the larger sheep have been at all times in better order, and more forward in feeding, than the other sort ; in so much that my shepherd, who was at first greatly prejudiced against the larger sheep, is now so fully convinced of their superior hardiness, that he has frequently urged me to keep none of the others.

I might proceed to take notice of many other opinions that are generally adopted on this head, with as little reason as these al-

* By chusing such sheep to breed from, as have little variation between the fineness of the wool on the buttocks and other parts of the fleece, I have seen some sheep, in which the difference of value of different parts of the fleece was upwards of ten to one, and others in which it would hardly amount to the proportion of two to one.

ready enumerated, which, to avoid prolixity I omit. To enable you to judge for yourself in these cases, it may perhaps be sufficient for me briefly to remark,—that as there seems to be an indefinite variety of breeds of sheep, so the peculiarities that distinguish these different breeds from one another may be infinitely diversified. Some differ from others in regard to size; others may vary with respect to hardiness or delicacy of constitution; others in the shortness or length of the wool, while others differ only with regard to the coarseness or fineness of it. And in the same manner they may vary from one another in respect to every other peculiarity by which one breed may in any case be distinguished from another.

And as there is nothing to prevent any of these distinguishing qualities from being united with any one or more of the others in the same sheep, we need not be surprised if we meet with varieties of sheep differing from one another in all possible respects. Thus one kind may be small and hardy; while another, although small, may be endowed with a tender and delicate constitution.—One sort may be of a large size, and weakly temperament; while another is large, hardy, and robust.—One kind, although large, may carry short wool of a fine quality; while another small breed carries long coarse wool; or the reverse.—One sort may be large, hardy, easily fattened, and carry an exceeding weighty fleece of the finest filky wool; another may be large-boned and stately, and carry a very light fleece of fine wool; or a third sort, possessing all the other qualities of these, may yield a poor fleece of wool of the very coarsest quality.

In this manner may any one quality that renders sheep valuable, or the reverse, be accidentally combined with any other qualities

in infinitum : which I am satisfied does actually take place in nature, and produces a much greater variety of breeds of sheep, more or less fitted for any particular purpose that may be required, than is commonly imagined.

A necessary inference that we must draw from these premises will be,——That in some particular places it may so happen, that a particular breed of fine-wooled sheep may be met with, which may be really of a more tender constitution,—more difficult to rear, and less profitable to the owner, than another sort in his neighbourhood that carries wool of a coarser quality. On the other hand, it is possible, that in another district there may be a breed of sheep that carry very coarse wool, which are at the same time of a weakly and delicate constitution; while in another corner there is found a breed which carry as fine wool as the first, and enjoy a constitution and temperament of body as hardy as could be wished for.

And as the same diversity may take place with regard to the qualities that may be combined with the length or shortness of the wool, or any other distinguishable peculiarity, we ought to be taught to be extremely cautious about drawing general conclusions from any particular cases that may have come under our own cognisance, and by no means to conclude, that because, in the instances that have occurred to ourselves, any two of these qualities were united or disjoined, that therefore they are always so *; but rather, with a cautious circumspection, let every one extend

* These observations are confirmed by the following facts, furnished me by Mr Carlier, in his *Traité des bêtes à laine*, who has made a more accurate survey of the different

extend his observations around him as far as is in his power; and if he perceives that his own breed does not already possess *all* the valuable qualities he would wish for, endeavour to discover others that possess in an eminent degree those qualities that are most wanted in his own.

But while he thus, with a laudable zeal, endeavours to improve his breed in one respect, let him be anxiously solicitous not to overlook any other particular that may alter the quality of his flock; lest, in gaining one thing, he should lose some others of yet greater value. Thus, let us suppose that his own sheep do not carry wool of a very fine quality, and that he would wish to improve it in that respect; in his choice of a breed to improve his own, or to supply its place altogether, he ought not to rest satisfied that he has obtained all he ought to have, if he gets a breed that carries wool of a much finer quality than his own; but before he finally makes a choice, he ought to attend to the quantity thereof,—to the hardiness,—shape, and all other valuable pecu-

different races of sheep in France, than ever has been made with regard to those of Britain.

In the *Champaign de Berry* they keep two kinds of sheep; one of which carries exceeding fine wool, reckoned equal to that of Segovia in Spain (p. 704.), from which the breed originally came; — and the other affords wool of a very coarse quality. The race of coarse-wooled sheep is there found to fatten more easily than the fine-wooled sheep (p. 705.) In Picardy there are also two breeds of sheep, the one yielding coarse, and the other fine wool; — but here the last-named sort fatten more easily, have a sweeter flesh, as well as finer wool, than the former, (p. 797.)

Again, the fine-wooled sheep of Berry yield fleeces near one fourth weightier than the others (p. 714.), while the fine-wooled sheep in Normandy yield less weighty fleeces, than the others there that carry coarser wool (p. 784.)

liarities

liarities of the sheep. And if he should find them deficient in any one of these, let him weigh the importance of it; and if he finds it too great to be sacrificed, there is no reason to despair of ever succeeding, but sufficient inducement for him to search around, till he perhaps meets with a breed possessing *all* the valuable qualities he wishes for.

This is a field for speculation, which although perhaps in some measure new to you, has not altogether escaped the penetrating attention of some English farmers: and although the principles upon which it depends, have not hitherto been fully developed, the sagacious Mr Bakewell, of whom you have probably heard, has, in some branches of rural œconomics, confirmed by a most successful practice the justice of the above remarks. By an attention peculiar to himself, he has been enabled to pick out for himself a breed of sheep, and cattle, and horses, more eminently distinguishable for those peculiar qualities in each kind that he most wished for, than is perhaps to be met with in the island; which ought to encourage others to go on with alacrity in prosecuting the same path that he has so happily entered, with the assured hope of making still greater, and perhaps more important discoveries.

Let us imitate Mr Bakewell, but not servilely copy after him. Did he sit down contented with adopting without reserve the improvements of those who went before him; or with a blind admiration of the talents of any man of the most superior merit implicitly adopt all the ideas that they suggested to him? Far from it.—He opened his eyes;—he observed with attention;—he reasoned with accuracy;—he determined for himself according to the best lights that he could procure. We only then imitate him
when

when we pursue the same route that he took for acquiring knowledge.—Let us thankfully avail ourselves of the lights that he has given us;—but let us not be so weakly blind as to suppose that he, or any other man, has ever attained the summit of perfection in this or any other science.

My countrymen in Scotland seem to be at present so fully prepossessed with an idea of the inestimable value of his breed of sheep, that they seem to be in some danger rather of adopting them because of his name, than from any real excellencies that they with certainty know they are possessed of. Spurious breeds are introduced as his; and the art of sheep-rearing is become a species of gaming, in some instances little short of that of 'Change Alley *'. When things are carried too far, I am always apprehensive

* As an instance of this kind, I beg the reader to peruse the following sale of sheep made at Ballinasloe in Ireland. The account of which I was favoured with by a friend.

October 5. 1773.

Leicestershire cattle fold at Ballinasloe, in Ireland, county of Gallway

		L.	s.	d.
66 Ews,	- - - - -	1094	5	5
9 Rams,	- - - - -	352	12	6
5 Ram lambs,	- - - - -	29	0	1 $\frac{1}{2}$
80		80)1475	18	0 $\frac{1}{2}$
Average each sheep,	- - - - -	L. 18	8	8 $\frac{1}{4}$
One draught colt,	- - - - -	L. 170	12	6
	Guineas	L.	s.	d.
1 Ram to Col. Pearse,	- - - - - 52	-	54	12 0
2 Ews, John Bodkin,	- - - - - 46	-	48	6 0
3	Carried forward	L. 102	18	0

five of danger.—If the one end of a balance is raised too high, there is danger that when it is left to itself it will descend too low,—and in national experiments this is always attended with danger.

Let it not be thought that I mean to depreciate in any respect the breed of sheep introduced by Mr Bakewell. Far from it:—for I am convinced that it is perhaps upon the whole the most valuable that is found in the island.—But it ought to be remembered, that the views of this gentleman when he began to improve his breed, were very different from those that ought to actuate the improvers in Scotland. His principal aim was, to obtain a breed of sheep that would fatten kindly for the English market, and at an earlier age than ordinary, all other considerations being looked upon as only of a secondary nature when compared with this one.—But from the present state of Scotland it is evident, that the principal view of the improver there, ought to be to obtain abundance of fine wool,—and the other qualities to be considered as of an inferior importance to this most material one.

3	Brought forward	Guineas	L. 102 18 0
2 ditto, Baron Rochford,	- - -	43	- 45 3 0
2 ditto, Col. Pearse,	- - -	40	- 42 0 0
2 ditto, Mr Blake,	- - -	40	- 42 0 0
2 Ram lambs, J. Moore,	- - -	8	- 8 8 0
11			11) 240 9 0
	Average each sheep,		L. 21 17 2 $\frac{1}{4}$

N B. These were sold as Mr Bakewell's, but none of them ever belonged to him.

Hence then it may happen, that Mr Bakewell's breed may be the very best that can possibly be found for his own particular situation; and yet of only a secondary nature with regard to us. —And although I am disposed to think that no man ought ever to be entirely satisfied with the improvements of another, so far as to allow his own understanding and active faculties to be lulled asleep, and thus prevent all future attempts at improvement; — yet even if we should grant it in the present case, as to the end that he proposed, seeing *that* cannot answer the views of our northern improvers, it surely behoves us to look out for ourselves, in the hope that strenuous and unremitting efforts may at last be crowned with the desired success.

The people of Scotland in general seem to be in danger of falling into another error with regard to their attempts at improving their breed of sheep; as it is a very prevailing opinion, that those only can succeed in this respect who introduce into the country a breed of larger sheep than they formerly possessed; and they usually judge of the degree of improvement that has taken place in the improvement of the breed of sheep by the proportional encrease in their size.

But as there is no reason to doubt, that all those qualities that ought to be most prized in this species of animals, may be as often found united with a moderate size of body, as with an enormous bulk; it may very readily happen, that we may get a very large, and at the same time a very unprofitable breed. This circumstance, therefore, ought to be looked upon as a matter of very little importance, in determining our choice of a proper breed of sheep.

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Perhaps I might go a little farther; and were it not that it might have somewhat the appearance of a fondness for paradoxical opinions, I would even alledge, that, in the present situation of Scotland, it would perhaps in general be more prudent to make choice of a breed of sheep of a moderate size, rather than one of a very large sort, supposing all other circumstances equal.

For as the wool must ever be considered as an article of greater proportional importance in Scotland than in England, whatever tends to produce the greatest load of it without any additional expence, ought to be considered as a certain gain in point of œconomy. But as the surface of the body bears a greater proportion to its solid contents in a small than in a large animal, the same weight of small sheep ought on this account to produce a greater weight of wool than if they were larger. This may appear to some a trifling consideration,—but upon an accurate investigation it will be found to be much greater than many are at present aware of*.

In the second place, a sheep of a moderate size is not in such

* The disproportion in this respect may be seen from the following comparative trial of the weight of the skin of a large and small beast.

Weight of the ox,				Weight of the skin,	
784 lb.	-	-	-	84 lb.	nearly one ninth.
2686 lb.	-	-	-	155 lb.	nearly one seventeenth.

Hence the weight of the skin of a small ox is nearly as one to nine of the whole weight of its carcase, and that of a large ox not above one to seventeen.—And as the wool of a sheep would be nearly in the same proportion, it would seem, that from this circumstance alone, nearly twice as much wool would be obtained from the same weight of small sheep as of large sheep. See Campbell's Polit. Surv. vol. 2. p. 176. and 179.

danger

danger of sinking deep in softish ground, as one of very great weight ; on which account it is not so apt to have its hoofs spoiled, and its feet hurt, so as to render it in some measure unable to travel ; and therefore lives upon the whole more comfortably for itself, and ought in general to thrive better, unless in situations where they can live entirely at their own ease, and quite free from wet or soft ground of any sort.

Thirdly, As many of the sheep-walks in Scotland consist of very extensive tracts of country, many parts of which are hilly and uneven, very weighty sheep would not be able to undergo the necessary fatigue of seeking their food on these extended pastures ; whereas sheep of a moderate size could range through the whole without the smallest inconvenience or fatigue to themselves, and therefore with greater profit to their owner. And

Lastly, In the present situation of Scotland, where it has not yet become the fashion to cut mutton into small pieces to be sold by weight, so as that nothing less than a quarter can be bought at once, there are so many more people who chuse to purchase small than large mutton, that, on this account alone, the small, if equally good, may always be sold to much better account, and come to a more ready market, at all times of the year, than that which is of a large size.

On these accounts it would seem prudent in the oeconomic improver in Scotland, rather to avoid getting a large breed of sheep than to wish for it ; and to endeavour, if possible, to discover a breed of a moderate size that should be possessed of the other valuable peculiarities that he might wish for.

It deserves, however, to be here remarked, that the same qualities which render large sheep improper for Scotland *in general*, may render them peculiarly proper in some situations.—A large sheep is less able to travel, and worse fitted for leaping fences than a small one,—on which account this breed will be most prized in rich enclosed grounds, where it is hardly possible to confine the others.

The woollen manufacture in Scotland has been for many years past of so little consequence, as to prevent men of talents from making any serious attempts toward the improvement of the quality of our wool. The care of our flocks has been entrusted to the lowest and most ignorant class of people among us, so that many errors in practice that have been introduced through ignorance or caprice, have been still adhered to with a blind perseverance, which may obtain the name of civil bigotry. The practice has been once introduced, and it becomes not a question now, whether it is at all necessary or not; but, taking that as already certain, the greatest ingenuity is exerted to discover reasons why it must be beneficial.

I have just now chiefly in my eye the practice of *smearing* sheep, as it is called; a practice so universally prevalent over a very large district in the south of Scotland, that I believe there are thousands of inhabitants in that corner of the country, who are as firmly persuaded that their sheep could not live without it, as that they could not live without food. Yet, however strange it may sound in their ears, it is a fact that admits not of a dispute, that in the northern parts of Scotland, where there are some as good sheep, and finer wool than any they have, the inhabitants have not a name for such an operation, nor the most distant idea of the

the practice : and yet their sheep do not suffer in the smallest degree from the want of it. Nor do the sheep of England, where this practice is hardly at all known,—nor those of any other part of the globe, feel any inconvenience from the entire ignorance of the inhabitants as to this practice. How it came to be originally introduced into this particular district, would be matter of curiosity to enquire ; — but it will be of greater *utility*, to examine with strict impartiality the reasons that are given by those who live in that district for their still adhering to this practice ; that we may thus discover, if it is attended with *any* beneficial consequences to make up for the prejudicial effects that it is well known to have upon the wool.

But as you are probably as much unacquainted with the practice as with the name of *smearing*, or *laying*, as it is sometimes called, be pleased to be informed, that by that term is meant a particular kind of plaistering, or *besmearing*, the whole body of the sheep, with an ointment composed of tar, and melted butter, or oil, mixed in certain proportions with one another. This is usually laid upon the sheep about the Martinmas season, about the 11th of November, in a particular manner which it is unnecessary here to describe.

Although this practice is so universal throughout all that part of Scotland to the south of the Forth, that there is perhaps hardly one man there who omits it ; yet if they be asked what are the beneficial consequences that result from it, and what would be the consequence of neglecting it, it is ten to one if any more satisfactory answer is given, than that it is necessary for keeping their sheep alive through the winter. I have examined many of the most sensible among them on this head ; and have never met with any thing that had the appearance of a reason for it, excepting

excepting the allegations of some, that it was of use in preserving their sheep from the scab; — that it keeps them warm during the winter season; — that it keeps the wool from losing in the spring, and that it augments its quantity. If there are any other reasons alledged for this practice, they have not yet come to my knowledge; although I have used my best endeavours to discover them. But as it is of importance that this practice should either be firmly established, or totally laid aside, I shall examine with a considerable degree of attention how far it can be beneficial to the public in any of these respects.

It is now well known, that the scab in sheep is entirely a cutaneous disease, like the itch in the human species, occasioned by small animalcules concealed in the skin, which excite an uneasy sensation in the animal, that, if allowed to come to a great height, will infallibly destroy it at last. In both cases these animalcules may be killed by proper ointments judiciously applied, and the disorder be thus removed. Oil, if of a proper tenuity to enter the small pores where they lodge, and envelope them entirely, might suffocate and destroy them: — and although butter and tar may in some stages of the disease be perhaps of *some* use in this respect, yet its efficacy, as I, and many others, have repeatedly found, is so inconsiderable as to be of very little avail in removing that disorder; for if it be far advanced, it will have no sensible effect at all.

But even supposing that it could be an *effectual* remedy for this disease in all its stages, it could only produce its effects when it should be applied close to the skin, and thus allowed to enter the pores made by these animalcules and suffocating them; which could only happen if the sheep were troubled with this disease, *at the*
time

time that this ointment was applied. But as the oil is quickly absorbed or dissipated, and the tar adheres to the wool, and rises from the skin as the wool advances in its growth, it cannot be supposed, after it has risen from the skin, that it can have any effect either in preventing or in curing the disease. For after that happens, the tar adheres so firmly to the wool as never to touch the skin again; and as this usually happens in the course of two or three weeks after it is applied, it could not possibly be of any utility either in preventing or curing the scab but at that very time when it was applied. This is what we might expect from reasoning: nor have they any argument to draw from experience to contradict this; as the sheep in the district where smearing is practised, are as liable to the scab, and suffer as much from this disease, as in any other part of the globe.

Probably their attachment to this favourite ointment may on this occasion be hurtful to them, as it will prevent them from attending to other cheaper and more efficacious remedies for this disorder than it is; tobacco-juice being a cheap, safe, and infallible cure for this disease in almost all its stages. But as this can only operate as a remedy after the disease has taken place, and not as a preventive, it would be almost equally absurd to anoint them with it when the sheep are in perfect health as with the other mixture *.

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* Tobacconists sometimes sell this juice, which they obtain in some particular part of their manufacture of that substance, under the name of *tobacco oil*. This is a thick, black, fetid substance; and this likewise is the cheapest and best way of being supplied with it where it can be easily got. But where this cannot be had, a watery decoction of the leaves may be made at no great expence.—Five Scots pints (two gallons and a half) of water may be added to one pound of the leaves and stalks, and
digested

As to keeping the sheep warm in winter, it is evident, that if they stood in need of it, their favourite ointment could not produce this effect; because it is risen from the skin before the severest cold of the season sets in. But the truth is, that sheep stand less in need of a defence from cold than almost any other animal. Covered with their warm fleece, they resist the severest cold without the smallest inconvenience; and they are probably never in better health, and of a certainty are never in higher spirits, than during a severe storm of frost in winter, provided they have their bellies

digested in a slow heat for twenty-four hours, and then strained off for use. It will be sufficiently strong for every purpose required if you have four pints of extract;—so that if it has evaporated more than enough during the operation, some water may be added to make up the quantity before it is filtered. This is a thin juice, which being poured upon the upper parts of the body, readily insinuates itself among the wool, and along the whole skin if necessary.

It is not only of use for curing the scab in all its stages,—but is also the most effectual mean of destroying lice, (commonly called *keds* or *kebs*), which are often very troublesome to young sheep. When you see any one nibbling at any part of its body with its teeth, and pulling out small tufts of its wool, it ought to be caught immediately, and, after parting the wool on its back, pour a little of this juice all along it, which will soon run down the sides, and cover the whole body, so as to destroy these vermin effectually, without injuring the wool, or hurting the sheep.—A weaker decoction than this above named, will often effect this purpose.

Tobacco-oil is sometimes employed for curing the *mange* in dogs; but if it is too strong, it often proves fatal to them. Sheep are not so easily hurt by it.—I had once a dog killed with this juice, although it had been diluted with a large quantity of water,—though this very juice, without any dilution, never hurt the sheep.—I have not yet been able to ascertain with precision the strongest decoctions that could be borne by sheep,—nor the weakest that would be of any service.

It were to be wished, that, instead of burning the tobacco that is seized, it were condemned to be steeped, as the juice might thus be sold out at a very moderate price, and be beneficial to the country.—Such as incline it, may easily rear as much in their garden, at a very small expence, as would serve their purpose well.—The seeds may be had in every seed-merchant's shop.

filled with abundance of wholesome food. Could it defend them from wet, it would be of real service to them indeed; as this always disheartens them, and occasions various diseases. It will hardly, however, be alledged that it produces this effect; as it is not at any time sufficient to prevent the fleece from being drenched with water, the weight of which is then extremely burthensome, which is still augmented by the weight of the tar. It is doubtful if even at the first it be capable of keeping the moisture from the skin; but sure enough, after it is risen from the skin, and adheres entirely to the wool, it can have no beneficial influence either in this or in any other way. In this point of view, therefore, the practice must be condemned as useless.

As to its keeping the wool from losing in the spring; if it once loosens from the skin at the roots, nothing will keep it from falling off: and experience shows, that the sheep in the smearing-districts are as often tattered in the spring as in any other parts of the country. The most effectual method of preventing that, is to keep the animal at all seasons of the year in high health and good condition.

With regard to encreasing the weight of the fleece; this it certainly does, not only by the weight of tar that is put upon it, but also by that of the dirt and rubbish that it fixes in the fleece by means of its glutinous quality. But what it thus gains in weight it much more than loses in value, not to mention the detriment that it is to the sheep, to carry such an additional useless burthen upon them: so that in this respect also it is highly detrimental*.

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* I have seen a small pamphlet, entitled, *Observations on the method of growing wool*

I have met with a few gentlemen who have been convinced of the inexpediency of *smearing* their sheep in general, who have nevertheless continued the practice with regard to their lambs, after they had given it up with their old sheep. But if it can be of no use to old sheep, it cannot benefit the younger. It must even in one respect be more prejudicial to them than it would be to the others. For as the wool of a lamb is longer than that of an old sheep of the same kind, and as it carries a much greater quantity in proportion to its bulk, while it is weaker, and less able to undergo great fatigue, than at a more advanced age; that wool, when drenched with water, becomes to it such an oppressive burthen, as often to occasion weakness, diseases, and death, when it would not have happened but for that cause. And as the tar adds considerably to the weight of the fleece, it tends to encrease this misfortune; and therefore is more highly injurious to this kind of sheep than it would be to such as are older.

Much more are those to be commended, who, with a view to prevent this inconvenience, cause all their lambs, especially if they are of the long-wooled sort, to be shorn about Lammas; as this makes them light and chearful during the winter season, and prevents many of those disorders to which the others are subjected, as I have often experienced. In particular, it is the only effectual method of preventing the wool of these sheep from loosening from

wool in Scotland, Edinburgh 1756, written by an ingenious and patriotic gentleman, who seems to be persuaded, that the practice of smearing with tar has been fondly adhered to by the farmers, from the gain they hope to make from this encrease of weight of their wool.—He very judiciously proposes to substitute a less hurtful salve than that commonly used;—but even that is unnecessary.

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the body in tufts in the spring, which can hardly be prevented in any other way.

These reasons, one would imagine, might be sufficient to satisfy any one that *smearing* is at best but an useless operation; and as it is always attended with a considerable expence, and no little trouble, it might be imagined, that some would be induced to try if it could with safety be omitted, even were the practice so universal as to afford no example of this having been ever done. But when we add to this, that the experience of so many extensive countries, in which sheep are reared to as great perfection as in any part of the world, shows that it can be omitted without the smallest inconvenience, we can find no other apology for those who still blindly continue it, but that obstinate perseverance in an old unaccountable practice, which no reason can authorise; although they must be sensible that it is attended with very pernicious consequences in some respects; as it renders the wool totally unfit for many kinds of manufactures, and makes it more expensive and troublesome to prepare for any purpose whatever; which has given occasion to our old ballad-makers to compose a song, the burthen of which is, *Tarry woo' is ill to spin*.

If you are as heartily tired of this disagreeable task of finding fault as I am,—you will be happy to be here relieved from it.
—In hopes of which, &c.

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O B S E R V A T I O N S

O N

N A T I O N A L I N D U S T R Y.

L E T T E R N I N T H.

C O N T E N T S.

Recapitulation.——Inferences.——The climate of Scotland compared with that of England: — proved to be better adapted for rearing fine wool than it is.——A comparison between the profits that would accrue to the farmer by rearing cattle or sheep in the Highlands of Scotland.——The advantage greatly in favours of sheep.——If sheep were kept there, a greater number of cattle could be likewise maintained in these mountainous districts than at present.——The inhabitants of that country are at present poor,— on which account it is not nearly fully stocked: — consequences that result from hence.——This poverty is daily encreasing.——Breeding sheep and manufacturing their wool the only practicable means of remedying this.——The promoting these strongly recommended to gentlemen of landed property in the Highlands.——The ease with which it might be accomplished pointed out.——Impediments to be removed.——A plan for destroying foxes, and other destructive vermin.



O B S E R V A T I O N S

O N

N A T I O N A L I N D U S T R Y.

L E T T E R N I N T H.

To Mr ***** London.

DEAR SIR,

October 24. 1775.

IF we take a retrospective view of what has been said in this series of letters, I hope you will now remain satisfied, that the distress of the inhabitants of the Highlands, and the poverty of Scotland in general, has been chiefly occasioned by an inattention to the only means that nature has provided these countries with for supporting the inhabitants, the establishing proper manufactures among them, which might render them useful members of

of society, and happy in the enjoyment of the blessings of life; — that such manufactures alone are fitted to produce this salutary effect, as draw their materials from the soil of the country itself, as these manufactures only can in the highest degree promote the interests of agriculture, without which manufactures must be precarious, and commerce for the most part destructive; — that the nature of the country does not admit of rearing flax in abundance, and that the attempts that have been made to introduce that crop, have been evidently detrimental to the country; — that, on the contrary, the rearing of wool for that purpose would be highly beneficial in this respect; — and that although Scotland hath not hitherto been remarkable either for the quantity or the quality of the wool produced in it, this has arisen entirely from accidental causes, that might be easily removed by a little care in the inhabitants. It now remains, that we proceed to enquire, if it possesses any positive advantages in this respect over the countries around us, that might serve as an incitement still more strongly to rouse us to engage with alacrity in improvements that so evidently tend to the good of the public, and the felicity of numberless individuals.

And as I hope you are satisfied that I have hitherto proceeded with a steady impartiality in discussing the several topics that have incidentally come in the way, and have on no occasion warped any facts to serve a particular hypothesis, I flatter myself that I shall be able to pursue the same steady and impartial conduct in what remains to be said relating to this subject. I the rather take notice of this circumstance here, because I am sensible, that in the whole course of these lucubrations, facts have so exactly corresponded with the plan I have been obliged to adopt, that a stranger would almost be tempted to think they had in
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some cases been fabricated for the purpose of supporting a favourite theory ; whereas the reverse of this is the truth. I began with a serious disposition to discover if possible what might be the most proper steps to be pursued to free my countrymen from misery and want.—I have probed my way all along, as the French would say, *la sonde à la main* ; have examined every circumstance with the utmost attention ; and have been gradually induced, by an amazing concurrence of facts, to fall into the opinion that I have at length adopted.

I need not, however, observe to you, who already know full well the natural warmth, and almost enthusiasm, of my disposition, that it is possible, after I have once been induced to form a decided opinion on this head, I may be on some occasions hurried perhaps rather too far. I am on my guard against it, and trust you will seldom find occasion to complain on this account.—But as you are cool and impartial, I depend upon meeting with your friendly correction if in any case I should transgress. In the firm persuasion of which I proceed with alacrity to the remaining part of the task I have assigned myself.

It has been proved already, p. 114. that wool of the best quality can only be produced in countries where the variation between the heat and cold of different seasons of the year is but very inconsiderable ; and the advantages that Great Britain possesses in this respect above the continental countries of Europe, was at the same time pointed out.

But although every part of this island partakes in some degree of this peculiarity of climate, yet the northern parts of it are much more eminently distinguishable by it than the southern.

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For

For as England is not only larger in itself, but also approaches much nearer the continent than Scotland does, its climate in some respects more nearly resembles that of a continental country: whereas Scotland, being in itself such a narrow tract of country, — so deeply indented by various arms of the sea, and so far disjoined from the main-land, enjoys all the peculiarities of an insular situation in a much higher degree than England. On this account the heat of the summer-season is more moderate in Scotland, and the cold in winter less intense, than in England; so that the variations of heat and cold are far less considerable here than in the southern parts of Britain: which, however inconvenient it may be in respect to raising grain, and many other particulars, must be allowed to be a very considerable advantage in our favour with regard to the rearing of sheep, and growth of fine wool.

You will not, I believe, be disposed to doubt, that the heat is more intense in England than in Scotland during the summer-season; but it is possible you may think it a little improbable, that the winters are more mild in the northern than in the southern parts of the island. The fact is however not less certain; although, for obvious reasons, it has been far less attended to than the other; so that the general sense of mankind cannot be appealed to with such propriety as in the other case: but there are not wanting particular proofs sufficient to establish its certainty without a doubt.

Writers on meteorological affairs having seldom extended their observations so far to the northward, have been surpris'd to meet with instances of what they thought surprising mildness in these northern regions, which they have enumerated as a kind of wonder

der almost approaching to a miracle; although these instances they have taken notice of as particular exceptions to the general run of seasons, were in no respect different from what happens for ordinary, and might have been expected by those who had a sufficiently comprehensive view of the laws of nature in this respect.

Thus we find, that in the year 1709, when the frost was so intense at Paris as to freeze even spirituous liquors, and over the rest of Europe was so severe as to destroy many common plants,—the French academicians remarking with surprise, that while the rest of Europe suffered so severely, the northern parts of Scotland escaped without having been almost at all affected with that general calamity.

Again, in the winter 1740-41 we meet with the same remark, and the truth of it confirmed by numberless examples collected with great care by the ingenious Mr Miller, in his Gardener's Dictionary, article *Frost*, to which I refer you for satisfaction on this head; only taking the liberty here to remark, that the roots of artichokes were so entirely destroyed in every other part of Europe, that, had it not been for Scotland, which furnished plants to all the nations around, it was doubtful if the very species of this plant might not then have been lost.

Another instance of the same kind, although in a lesser degree, occurred in our own time, which I deliver to you upon my own authority,—the fact being so recent as to admit of being easily proved or refuted by numberless persons still alive who must remember it. In the winter 1762-3 you will remember, that the frost was so intense in England as to freeze the Thames entirely over at London, where the ice became so strong as to be able to

carry booths that were erected upon the ice which remained for several weeks together. At that time I happened to be residing in a northern part of Scotland, at the distance of some miles from the sea; and having observed the news-papers regularly, I could not help remarking with some surprise, that the cold where I lived then, during all the time, was so very moderate, that even considerable rills were scarcely frozen, nor did it almost at all interrupt the ordinary operations of agriculture.

Neither need we look upon this as a singular case. For it is well known to every one who has occasion to be acquainted with both places, that when the county of Northumberland in the neighbourhood of Newcastle, is covered with snow to the depth of two or three feet, there is for the most part hardly as many inches depth of snow in the counties of Murray and Caithness; and still less in the western isles, where snow is seldom known to lie for a week or ten days together. In the higher inland parts of the country the snow does indeed lie longer than on the sea-coast every where: but as this is equally observable in England as in Scotland, the variation in this respect will always be in proportion to the height and distance of any place from the sea in both countries. And as the sea-coast in Scotland bears such a large proportion to the whole, there can be no doubt, that the winters are in general much milder in the northern parts of it, and in the isles, than they are either in the south of Scotland or in England in general; and that the surface of the country is not covered with snow near so long in the first as in the last of these countries*.

It

* Be pleased to observe, that I here speak of the country *in general*, and by no means intend that this should be understood of such places as the Isle of Wight, and the southern

It has been showed in letter third, p. 48. that if wool were reared in abundance in the Highlands, there would be a great probability that a spirit of industry and manufacture would naturally prevail among the people. And if the observations that have been made in this course of letters are just, there can be no longer any doubt, but that wool might be there raised in abundance, of as fine a quality as could be desired. But before we can with propriety advise the farmer to make choice of sheep rather than of cattle for his general stock, it will be necessary to enquire which of the two would in all probability afford him the greatest profit, and most steady and certain returns.

Nature has intended that sheep should live upon drier and less succulent vegetables than cattle; they therefore, in general, thrive better on mountains, where dry kinds of grafs are usually produced, than cattle do; which, for the most part, delight to pasture in vallies, where more tender vegetables are produced. But as the greatest part of the Highlands of Scotland consist of hills that produce dry vegetables, it seems probable that they would be better fitted for rearing sheep in general than cattle; as the first would eat a great many plants which are not at all touched by the latter. On which account it is probable that a much greater weight of meat might be produced in these pastures if sheep were kept upon them, than when cattle only are grafed upon them.

southern shores of Kent, Suffex, Hampshire, Devonshire, and Cornwall; which, from their proximity to the sea, must have very mild winters; but of the more internal parts of the country, as Wiltshire, Somersetshire, &c. compared with Caithness or Sutherland, Sky or Lewes, &c.

But

But although it should be supposed that there would be no difference in this respect, it will not be disputed, that even in pastures that are ever so well adapted for cattle, at least an *equal* weight of mutton could be reared upon them as of beef. And as I presume these two kinds of meat are of equal value, let us examine, upon this footing, which of the two it would be most the interest of the *breeding* farmer to rear.

Suppose, then, that a farmer has pasture sufficient to keep a hundred pounds worth of cattle, and that he sells annually one fourth part of these; his annual income from them would be twenty-five pounds. Upon the foregoing data he could keep an equal value of sheep, and consequently draw an equal price for those that he sold annually; so that in this case also he would draw twenty-five pounds. But as, on this supposition, he has also the wool of his flock to dispose of annually, we must make allowance for the value of the fleece; which may be computed, even where the wool is but of an indifferent quality, at one fifth of the total value of the lean stock, including the young sheep: and if the wool were of the very best quality, it might be worth the half of it. So that at the most moderate computation he could sell twenty pounds worth of wool; which added to the other twenty-five pounds, make forty-five in all, — being twenty pounds, or eighty per cent. clear profit: so that he would draw nearly double the profit from sheep that he can do for cattle, independent of the benefit he might reap from other circumstances.

The English are so sensible of the superior advantage that they derive from the rearing of sheep instead of cattle, that they have for many ages in a great measure neglected the last, depending
upon

upon Ireland and Scotland for a supply. It surely, however, behoves those who are materially interested in the produce of the Highlands, to consider well how far it is expedient in them to forego such solid advantages as they might derive from thence.

But if the English derive greater advantage from rearing sheep than cattle, even in their rich and fertile fields, the difference in this respect must be much greater to the inhabitants of the Highlands of Scotland. For so long as they shall continue to rear cattle chiefly, the number of beasts fed upon their hills must be but very inconsiderable. For, to keep their cattle from starving, in case of an unusual fall of snow, it becomes necessary for every farmer to be provided with some hay to give them on these occasions, or to run the risk of losing his whole stock. And as they have but little ground to spare for hay, they are not at liberty to keep with safety more cattle than this small stock of provender is sufficient to sustain on these emergencies. But as sheep can be sustained on dry heather tops, or short grass, upon which cattle could not live, they are, on hilly countries, in far less danger of perishing by storms of snow than cattle are, and therefore require far less provision of dry food for winter than these do.

Thus, supposing the country remained in the same state it is in at present in all other respects, a much more valuable stock could be safely kept of sheep than of cattle; but if the attentive farmer should propagate whins for their winter-sustenance, as has been recommended in letter fourth, as many sheep could with safety be kept in winter as the pastures could maintain in summer; which would amount to four times the value of the cattle that could be sustained in the same places.

Nor

Nor is this the only benefit that would arise from rearing sheep instead of cattle on these hills. For it has been remarked, that in all cases where sheep have been substituted for cattle, the pasture has been in a short time improved; insomuch that those hills which were continually covered with heath, in a few years assume a pleasant verdure, and carry a much greater quantity of short nourishing grass than formerly. This has been lately experienced in many parts of Perthshire and Argyleshire, where their flocks of sheep have been of late much encreased *.

Hitherto it has been supposed, that sheep should be substituted instead of cattle; but you will now, I hope, perceive, that there is no necessity for banishing the one to make room for the others; as it is sufficiently obvious from the foregoing remarks, that a very great value of sheep might be kept on these Highland hills, without diminishing the number of cattle in the least. Nay, should it be found expedient in other respects to encrease the number of their cattle, these very sheep would put it in the power of the inhabitants to do this with much greater safety than they could attempt it at present. For as the dung of these sheep, if judiciously folded, would greatly enrich such patches as admit of being cultivated; these patches, if laid down to grass in good order, would encrease the stock of winter-provender for his cattle,

* A sensible gentleman writes thus to Mr Loch: "As I am not sufficiently acquainted with wool, to say any thing of the quality of what is produced in the above district (Argyleshire), I shall say nothing of that; but an easy enquiry will ascertain it; but can say, that, if it improve as much as the sheep have mended the pasture on the hills they feed upon, it must soon be excellent; for, from being covered with dry sapless heath, they are converted into a beautiful verdure, obvious at several miles distance; so that they can be distinguished from those that are not under sheep." *Loch's Letters*, p. 31.

so as to enable the farmer to keep an additional number of cattle should he so encline.

In this manner the country could not fail to be improved, and the farmer be rendered more comfortable in his circumstances, and become a much more respectable member of society than he is at present.

In all the foregoing calculations it has been supposed, that the Highlands are as fully stocked with cattle at present as the nature of the country in its present state will admit of. But those who are best acquainted with the present state of the Highlands know full well that this is far from being the case. For as the people who now inhabit these countries are exceedingly poor, they are not able to purchase stock * properly to consume the produce of their farms,—so that you may frequently meet with very extensive tracts of land with hardly any stock at all upon it,—the number of cattle being usually rather in proportion to the richness of the possessor, than to the quantity of food that his farm produces. And as the inhabitants, so long as the present system continues, must become gradually poorer and poorer, the prospect that this affords is so truly alarming, as ought to rouse the gentlemen of property there to exert themselves to the utmost to stop that growing evil, before it becomes so utterly intolerable as totally to depopulate the country, and render their possessions a miserable desert, instead of being the seats of opulence, festivity, and joy.

And as there seems to be no other way of doing this so easily

* By *stock* here is meant live cattle, which are usually called *stock* in grazing-countries.

as by encreasing the number of sheep, and encouraging the manufacture of their wool among the inhabitants, they ought surely to apply themselves to promote manufactures with an unremitting attention. For if the farmers had a greater proportion of sheep, carrying good fleeces of fine wool, the profits they would derive from thence would enable them gradually to encrease their number, so as in time to have a stock of animals proportioned to the produce of the fields they rented, which would put it in their power to yield to the proprietor, without incommoding themselves, in some cases ten times the rent that would at present reduce them to misery and want.

In their attempts of this kind the gentlemen would meet with one favourable circumstance, that is but seldom experienced in attempts towards improvements of any sort. For the common people, finding that wool is amongst the most saleable commodities they can rear, would almost to a man be disposed to cooperate heartily in every plan that had a tendency to facilitate the rearing the useful animal which affords it. So that almost all that would be required of the gentlemen, would be to concert and put in execution proper plans for removing the principal obstacles that prevent the rearing sheep in abundance at present, and taking care to put it in the power of the inhabitants easily to obtain sheep of the proper kinds, from the rearing of which they could reap most profit.

At present the greatest bar to the rearing of sheep in the northern parts of Scotland, is the immense number of foxes and eagles that abound through the greatest part of these extensive tracts, so that the inhabitants are under the necessity of always housing their sheep at night; which tends greatly to hurt the quality of
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the wool, and to impair the health of the animal. And as it is impossible to provide proper house-room for great flocks of sheep, this proves a most effectual bar to the encreasing their flocks throughout the greatest part of the Highlands.

In some counties the gentlemen have entered into an association to tax themselves for raising a fund to be distributed in premiums for killing these vermin. But as this practice has not yet become entirely general, it is to be feared that some counties may relax a little in their efforts to this purpose, unless the neighbouring gentlemen follow their example. But if a county should be found where the gentlemen are so dead to all sense of public spirit, or so blind to their own interest, as to refuse to join in such a salutary association, it would be folly in others to suffer themselves to be losers, because these neglect to do their duty. Would it not be more becoming in them, publicly to stigmatize the inhabitants of those counties as enemies to improvements, and leave them to that contempt that ought to attend them, while others with a manly boldness advance in the right road to riches and plenty.

Where these vermin are very numerous, a small price set upon each head may be sufficient; and when they begin to decrease, that price may be gradually raised without raising the fund of payment.—The lowest price on the head of a full-grown fox or eagle in any part of Scotland ought to be five shillings.—If it is more, the diligence of individuals will be encreased, so that they will be the more quickly destroyed. I know that in some counties a guinea is already given for a fox's head.—Were all the others come to the same state, the evil would be quickly removed.

But whatever is the price to be given, there ought to be a very

material difference between the premium for killing a bitch-fox with young, and a fox of any other sort: nor ought the same price to be paid for the whelps of that year before Martinmas, as for any other fox;—because if the same price is paid for young or old, male or female, those who make it their business to hunt for them, will spare the females while with young, that they may have a chance of getting the whelps; by which means many will escape that might have been destroyed.

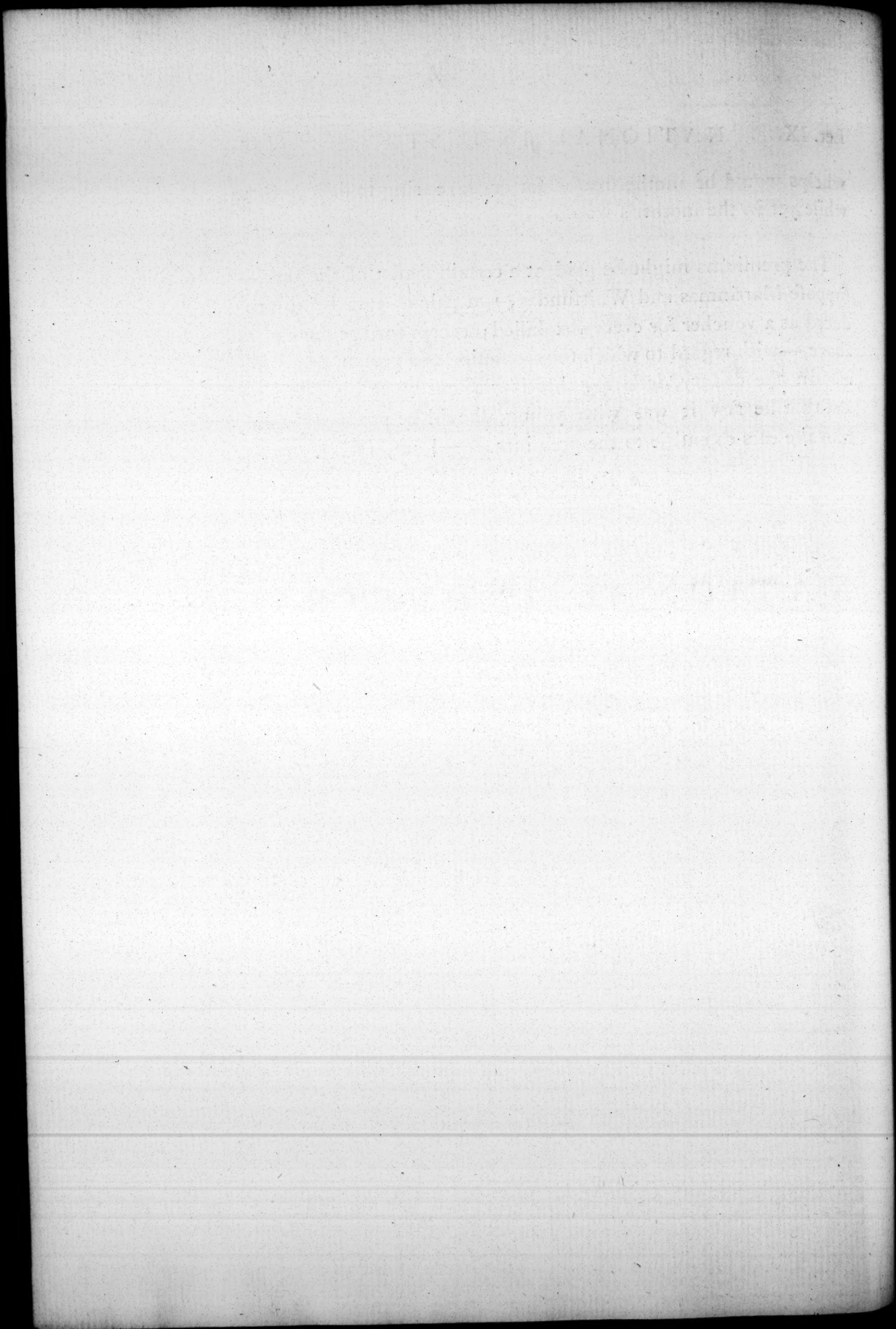
What I apprehend would be the most efficacious plan for suddenly destroying them, would be to fix a very high premium on the head of every female with young,—a more moderate price on other full-grown foxes, and a smaller still upon whelps of that year.—Suppose a guinea for every female with young,—half a crown for every whelp of that year before Martinmas, and five shillings for every other kind of fox, keeping nearly at these proportions for any higher or lower price that could be afforded.

The good effect of this mode of distributing the premiums would be, that as there was such a strong temptation for seeking the females when pregnant, every art would be devised for discovering their haunts at that season of the year, and killing them, so that very few would escape;—and thus very few young ones would be produced. And as the male usually frequents the same haunts with the female at that season, many of these would naturally fall in the way, and be killed at the same time. Or if they escaped, when the rutting-season approached, there would be so few females, that the males would fight about them, and destroy one another; or they would withdraw to other parts of the country, where they could pursue their pleasures with less interruption.—The small premium that could be obtained for

whelps would be another reason for endeavouring to destroy them while yet in the mother's womb.

The premiums might be paid at a certain season of the year,—suppose Martinmas and Whitsunday,—a pair of ears being produced as a voucher for every fox killed; except for the females as above,—with regard to which the attestation of a parson, or gentleman in the county, declaring that it was cut up in his presence, and that he saw it was with young, should be produced along with the ears to entitle to the premium.—I am, &c.

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N A T I O N A L I N D U S T R Y.

L E T T E R T E N T H.

C O N T E N T S.

Benefits that have resulted to society from a proper degree of attention in the inhabitants of any one country to improve the natural advantages it possessed,— or to supply its defects by transporting from distant regions the useful animals or vegetables of which they were not originally possessed,— exemplified in many kinds of fruit-trees, salads, and other esculent plants,— hops,— potatoes,— rhubarb, &c.; — as also animals,— poultry of various sorts,— horses, &c.— History of the silk-worm, and its various migrations in Europe.— Inferences from this induction :— There is no reason to doubt but our breed of sheep may be improved.— This cannot be effected without the concurrence of men of power and influence.— Arguments to induce these to attempt it.— Scotland better adapted for carrying on the woollen manufacture than England,— and why.— A view of the peculiar advantages that the parish of Halifax in Yorkshire enjoys in this respect,— its present flourishing state, and the amazing encrease of its inhabitants of late, in consequence of possessing these advantages.— The North Highlands of Scotland compared with the parish of Halifax.— An accurate hydro-geographical description of that part of the country.— Result of this very accurate comparative view : — That the parish of Halifax is possessed of no natural advantages for carrying on the woollen manufacture that this part of the country does not possess in as high a degree ; — and that these Highlands enjoy many other great advantages for carrying on this manufacture that no part of Yorkshire can lay claim to.

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N A T I O N A L I N D U S T R Y.

L E T T E R T E N T H.

To Mr ***** London.

DEAR SIR,

October 30. 1775.

IT would seem that the creator of this universe, with a view to promote that friendly intercourse between different nations on this globe, which tends so much to civilize mankind, and to improve useful knowledge, had denied to every nation *some* of the principal conveniencies of life that he had bestowed upon others; which might serve not only as a spur to the inventive faculties, but also as a bond of union between different communities.

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Thus

Thus we learn from historical records, that Italy, which has long been in possession of all the fruits that are known in temperate climates, was originally unacquainted with many of the most valuable kinds. Lucullus first brought cherries from Pontus, and planted them in his princely gardens at Rome; in which country they have ever since flourished in as great perfection as in their native climate. And in like manner had been introduced into Italy at different times, the pear (*Malus*, *Pyrus*, or *Epyrus*) from Epirus; — the peach (*malus Punica*) from Carthage; — the apricot (*malus Armeniaca*) from Armenia, and the quince (*malus Cydonia*) from Syria, as their names sufficiently shew. These having been in time naturalized to that country, were by the Romans transported into all those regions which came under their dominion; by which means they were gradually dispersed over the northern and western parts of Europe, where many of them now flourish as well as if they had been natives of these countries. Thus does a spirit of conquest, that most destructive of all dispositions of mind, sometimes become the means of diffusing blessings to the posterity of those very people whom it enslaved, and loaded with misery and chains.

But commerce effects the same salutary purposes in a more gentle and less violent manner. By means of it, many of the fruits and roots of the most distant countries have been naturalized in Europe. The tree is perhaps still alive in China that afforded the seeds from which the first sweet oranges were reared in Portugal; although these have since prospered so abundantly, that were it not for the name of *China oranges*, which they still retain, it is probable the inhabitants of Portugal might in time imagine they were natives of their own country. — Nor is it above thirty or forty years since the first handful of rice was introduced

duced into Carolina; where it has prospered so abundantly, as to enable that country to supply almost all the markets of Europe with this valuable sort of grain.

As to ourselves in this island, about the beginning of the sixteenth century, we had neither fallads, cabbages, turnips, carrots, nor any of those garden-roots that now constitute such a principal part of the food of the lowest people in Britain. Nor was it till long after that time, that the collyflower-plant was introduced into our gardens, although it is well known that this plant cannot now be found in such perfection in any other part of the globe.

About the middle of the same century hops, and pippins, were first brought into England, as also pale gooseberries,—a fruit that is found to prosper better in our northern climate than in any warmer region. Possibly that plant might be then preserved in a green-house, as were the first plants of the larix-tree, that were introduced into this country between thirty and forty years ago, although it is now known to be one of the most hardy trees that is found on the face of the earth.

These are instances that may not come within the reach of every one.—But surely there is no man so ignorant as not to know, that the potato, this most useful of all common roots, was introduced into Europe from a very distant region, almost within this present century; and although it now furnishes the principal part of the food of the inhabitants of almost every part of the country, there are many *young people* who remember when it was only cultivated in the gardens of the curious, and presented as a rarity. And not ten years ago, the rhubarb-plant was reckoned so peculiarly

liarly confined to the regions of Tartary, that the Russian emperors regulated the quantity brought to market, and fixed the price, in the same manner as the Dutch at present do the cloves and mace, and made us pay annually near two hundred thousand pounds for this article alone; which is now found to grow in our gardens to as great perfection as in any other part of the earth, and will ere long become as common as the wild dock, if it is not attended to.—I hope the time is not far distant, when we shall be able, by means of our colonies, as effectually to serve ourselves with the Dutch spiceries; as some attempts for that purpose are now carrying on under the direction of a public-spirited gentleman, who does honour to his country; and if the undertaking be conducted with judgement by those who may succeed him, can hardly fail of success *.

Nor is it with respect to vegetables alone that we have reaped improvement by our communication with other nations; seeing many of the animals that are now familiar to us, have been

* “General Melvil, when Governor of St Vincent’s, established in that island a public experimental garden, and put it under the care of the ingenious Dr George Young, with a view to try what valuable plants might be reared with profit in that island; who brought a certificate from the first magistrate in St Vincent’s, that he had growing in this garden in the month of May 1772, 140 healthy plants of the true cinnamon-tree,—besides many other valuable plants, among which are Logwood,—Turmerie,—East India Mangoc,—Tobago Nutmeg,—Sesamum,—Cassia Fistula,—Vanilloes,—Anatto,—China Tallow-tree,” &c.—*Political Survey of Great Britain*, vol. 2. p. 681.

Since that time the French have made an attempt to obtain young plants of the spiceries from the Dutch settlements; and have succeeded, notwithstanding the jealous watchfulness of that suspicious nation: so that there is little room to doubt but the Dutch will soon be deprived of the benefits of that important monopoly, which they have so long enjoyed.

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brought from very distant regions.—The Turkey is a native of Asia, as its name imports;—the Peacock was first introduced from the East Indies;—and the Pheasant is a native of Asia Minor, which has only been introduced to one of the coldest places in Scotland within these very few years, where it thrives as well as the Ptarmigan and Grouse.—Birds that have always been natives of our desert hills, even our common cocks and hens, which are now found at every barn-door, were originally brought from Asia. The horses of Barbary,—Turkey,—Persia,—Andalusia, and Arabia, have been familiarised to our island; and by a judicious management, have produced to us a breed of horses that cannot be equalled in any part of the world.—And many of the fallow-deer* that run wild in our parks, are originally natives of the warm and fertile plains of Indostan, almost within the tropics.

I might here also take notice of the many European animals that have been with success introduced into our settlements in Asia, Africa, and America.—I might mention the almost total want of quadrupeds of every sort in the newly-discovered island of Otaheite, which enjoys a temperature of climate as favourable for all the domestic animals of Europe, as any country in this northern hemisphere; and will no doubt, in time, receive great benefit from those that may be transported to it. But I rather chuse to exemplify this by the history of the most delicate useful animal that has been reared by man, the silk-worm; as it affords the most striking proof of what may be achieved by human industry and application.

Before the time of Tiberius Cæsar it was imagined, that China

* The spotted fallow-deer were brought from Indostan by K. James I.

or Persia were the only parts of the world where this delicate reptile could be reared; and the cloth wove of its web was fold for its weight of gold, and therefore could only be procured by princes, and the chief magistrates of kingdoms. But the luxury of the Roman court offering such a high premium to adventurers, some daring genius, about the time of Augustus and Tiberius, ventured to transport the eggs into Greece, where they were found to hatch, and the insect to thrive extremely well. In time they were transported to the neighbouring country of Asia Minor; but it was not till several ages afterwards, that they were naturalized to Italy by the enterprising spirit of the Franks, who founded a kingdom in these parts. From thence they travelled westward into Spain: and France, which now derives from them a considerable commerce, owes it entirely to the enterprising spirit of Henry IV.; who, contrary to the opinion and advice of the sagacious Sully *, persisted in his resolution of having the experiment fairly tried; which succeeded, in all probability beyond his most sanguine expectations. Nor is it at all certain but that the next century may see them upon the borders of the Baltic, as the King of Prussia is said to have lately tried the experiment with success.

But however that may be, we have from this example a most satisfactory proof, that animals even of the most delicate sort, may be successfully reared in countries far distant from that in which they were originally found, and under climates considerably different from what these enjoyed.

In the time of Tiberius Cæsar, it was no doubt deemed a bold thought, and considered as an exceeding hazardous undertaking,

* See Sully's Memoirs *passim*.

to attempt to rear this animal in Greece: but the man who should have then proposed to carry silk-worms into the northern regions of Gaul, in the hope of breeding them there with profit, would have been looked upon as altogether out of his senses. Yet future experience has sufficiently shown, that, had this experiment been conducted with the necessary skill and caution, it would happily have succeeded. How much less venturous is it then in us to think, that by proper attention and skill, as fine wool might be raised in the Highlands of Scotland, as on the Asturias of Spain, or the frozen mountains of Thibet? as, from the minute investigation that has been made with regard to this subject in the preceding series of letters, it does not appear that there are *any* reasons to make us dread the success of any fair trial that might be made with this view.

But reasoning alone is not sufficient to give to Scotland the many blessings that would accrue to it should this ever come to be the case. For, without an active exertion in those who are peculiarly interested in the prosperity of the country, and in a sphere of life sufficiently elevated to give spirit to any great undertaking, we may still, like Tantalus, labour under a heavy load of poverty and distress, although the remedy to all our ills be constantly within our view; being unable to obtain it by our own feeble efforts, unless aided by some powerful and friendly hand who may put it within our reach. But the time I hope approaches when such assistance will be given as to raise this drooping country from her languid condition, and to give her that strength and firmness which the natural soundness of her constitution may give us room to hope for, and that weight in the political scale of Europe that her intrinsic advantages ought naturally to ensure.

England

England has long enjoyed the woollen manufacture entirely unrivalled by the Scots ; although this country is almost in every respect better adapted for carrying it on with success than England. For as running water is indispensably necessary to many branches of that manufacture, a country which abounds with mountains and living rills, is, beyond all doubt, more peculiarly calculated for that, than one which is more level. And I leave any one who has seen the limpid rapid rivulets in Scotland, to compare them with the dead muddy waters in England, and tell on which side the balance falls. It is chiefly on account of the mountains, and the running waters these produce, that the parish of Halifax in Yorkshire has of late flourished so much in the woollen manufacture ; while, in many other places of England, on account of the want of this necessary convenience, the manufactures have gradually declined ever since the other European powers have come into competition with us, and reduced the prices in foreign markets. But as you may not perhaps be fully aware of the vast importance of this circumstance to the woollen manufacture, I shall transcribe a passage or two from a very sensible writer on this subject, which will place it in the proper point of view.

“ In the course of our road, (says he), among the houses, (this
 “ was between Blackstone edge and Hallifax), we found at every
 “ one of them a little rill or gutter of running water : if the
 “ house was above the road, it came from it, and crossed the
 “ way to run to another ; if the house was below us, it crossed
 “ us from some other distant house above it : and at every consi-
 “ derable house was a manufactory, *which not being able to be*
 “ *carried on without running water*, these little streams were so
 “ parted

“ parted and guided by gutters or pipes, that not one of the
“ houses wanted its *necessary* appendage of a rivulet.

“ Again, as the dying-houses, scouring-shops, and places
“ where they used this water, emit it tinged with the drugs of
“ the dying-vat, and with the oil, the soap, the tallow, and other
“ ingredients used by the clothiers in dressing and scouring, &c.
“ the lands through which it passes, which otherwise would be
“ exceeding barren, are enriched by it to a degree beyond imagi-
“ nation.

“ Then, as every clothier must necessarily keep one horse, at
“ least, to fetch home his wool, and his provisions from the
“ market, to carry his yarn from the spinners, his manufacture
“ to the fulling-mill, and, when finished, to the market to be
“ sold, and the like ; so every one generally keeps a cow or two
“ for his family. By this means, the small pieces of inclosed
“ land about each house are occupied ; and by being thus fed,
“ are still farther improved from the dung of the cattle. As
“ for corn, they scarce sow enough to feed their cocks and
“ hens.

“ Such, it seems, has been the bounty of nature to this coun-
“ try, that two things essential to life, and more particularly to
“ the business followed here, are found in it, and in such a situ-
“ tion as is not to be met with in any part of England, if in the
“ world, beside : I mean, coals and running water on the tops of
“ the highest hills,” &c.

I shall soon have occasion to show, that our author was a little
out in his conjecture in the end of this paragraph, and shall point

out some places in this island where all those advantages are enjoyed without many of the inconveniencies that accompany them in the parish of Halifax. In the mean time we may observe, that in consequence of these advantages, the inhabitants have encreased their manufactures of late to an amazing degree; and with it the number of the inhabitants has also encreased.

From the same writer we learn that, “in the year 1443, there
“were only thirty houses in the parish of Hallifax; but in the
“next century it was much encreased: for history tells us, that
“Queen Elifabeth being petitioned by the inhabitants of Hallifax
“to grant them some privileges, set forth, as an instance of their
“loyalty, that no less than 1200 * young men went out armed
“from this one parish, and, at her Majesty’s call, joined her
“troops to fight the Popish army, then in rebellion under the
“Earl of Westmoreland.

“If they then, (continues he), were so populous, what must
“they be now their trade is so vastly enlarged by the great de-
“mand of kerfies for clothing the armies abroad, (this book was
“written in the year 1746)? Some maintain, that it is encreased
“a fourth at least within these fifty years, from their having en-
“tered on a manufacture of shalloons, which were never made
“in these parts before, in any quantities. And of late years it
“is still more encreased, by the people of a neighbouring part
“driving away about 4000 Irish manufacturers, who, with about
“2000 others accompanying them, settled there.” And as the ma-

* The author here has 12,000; which I have supposed a mistake,—as Camden, who was in the parish of Hallifax after that period, computes the inhabitants then only at 7000 in all.

nufactures of that place have continued to encrease at a very surprising rate, we may form some idea of the populousness of that parish at this time. In the year 1748, our author tells us, that this single parish contained twelve or thirteen chapels of ease, besides about sixteen meeting-houses of different sects of religion ; so that our author might well exclaim :

“ As the vicarage is thus far extended, and so populous, what
“ must the market be which supplies this vast number of inhabi-
“ tants ? and yet these *are all brought from other parts of the coun-*
“ *try.* For as to corn, they sow little, and they feed very few
“ oxen or sheep ; *and as they are surrounded* with large manufac-
“ turing towns on every side, all of them employed, like them-
“ selves, in the clothing-trade, they must necessarily have their
“ provisions from other more distant parts.

“ The consequence then is plain, their corn comes up in great
“ quantities out of Lincoln and Nottinghamshire, and the East
“ Riding ; the black cattle from thence, and from Lancashire ;
“ sheep and mutton from the adjacent counties every way ; but-
“ ter from the North and East Ridings ; and cheese out of War-
“ wickshire.

“ Thus one trading manufacturing part of the country, in a
“ barren soil, gives and receives support from all the countries
“ round it.”

I hope you will excuse me for giving you this long quotation almost entire, as it so clearly points out the circumstances that are most essentially necessary for carrying on the woollen manufacture with success, as well as the great benefits that redound to

a country itself, and the influence it has on the neighbouring countries, when a spirited manufacture is introduced into it.

But as our very ingenious author had not the means of being informed with absolute certainty of the encrease of the inhabitants of this parish, and its sudden exaltation to the very elevated rank it now holds in Britain,—I shall just observe, that from the Reverend Mr Watson's history of the parish of Hallifax we learn, that by an accurate survey made in the years 1763 and 1764, it was then found to contain 8244 families; which, at only five to each family, amounts to 41,220 inhabitants; so that this is perhaps the most populous parish in the universe.

This surprising number of inhabitants is to be attributed entirely to the woollen manufacture in these parts, which only began to be established there about the middle of the fifteenth century; before which period it was one of the least populous, as being one of the most barren and uncomfortable parts of England. From the same author we learn, that about the year 1443, there were only thirteen houses in the lordship of Hallifax; that in a hundred and twenty-three years after that they amounted to five hundred and twenty, and in little more than two hundred years more to one thousand two hundred and seventy-two;—so that in little more than three hundred years, the inhabitants had encreased to ninety-eight times the original number, wanting a very small fraction.—And it is probable that other divisions of this extensive parish have encreased in a much greater proportion; being still more barren and less accessible than this is; the greatest improvements having taken place in the most wild and mountainous parts of the country, which Camden has described to be

be "*solum sterile, in quo non modo commodo vivi, sed vix vivi possit.*"

Permit me now to draw a short parallel between this parish, and many parts of the Highlands of Scotland, with a view to discover which of them are naturally possessed of the greatest advantages for carrying on the woollen manufacture.

In most mountainous countries the hills rise gradually above one another to a great height as you recede from the sea, so that the access to the internal parts of the country is every way steep and difficult. But throughout the greater part of the North Highlands * of Scotland, although the country may in strict propriety be called mountainous, nothing of that sort is observable. Like the deep seas in the bay of Biscay, or near the cape of Good Hope, when agitated by a storm, although the surface, if considered in one general view, may be called level; yet when viewed nearer, it is found to be scooped out into immense cavities, or heaped up into innumerable ridges of stupendous height, the alternate successions of which fill the most daring mind with horror and affright.

Such, in some measure, is the situation of these Highlands. It seems to be an immense plain, that has been by Nature, in some of her wanton freaks, thrown up into large and irregular ridges of mountains, with wide and deep furrows between them, which run far backwards into the country in a direction nearly horizontal.

* By *North Highlands* is here understood all that part of Scotland to the north of Lochness.

Hence

Hence it happens, that although the mountains sometimes boldly advance into the sea, and with their towering tops bid defiance alike to the fury of the tempest and the raging ocean; yet in other places these furrows are cut so deep, and run in such a level direction, as to admit the sea to flow throw them into the very heart of the country, although skirted on every side by hills suddenly rearing their tops to a great height above them. These inlets are called by the Lowlanders *friths* or *firths* (fretæ) and by the inhabitants of the Highlands *kiles*.—But on the West coast, where they are most numerous and extensive, they have obtained the improper appellation of *lochs*.

From these larger furrows there branch off many others, the bottom of which are only elevated to a small degree above the level of the sea, which run back into the more inland parts of the country; being denominated *straths*; in the lowest part of which always flows a river of some sort, with a gentle current towards the nearest frith, or arm of the sea. And at the back of the next ridge of mountains runs another pretty level strath, in a direction often nearly parallel to the former.

Thus it happens, that the inhabitants of each of these straths or vallies,—the only habitable parts of the country, may always have the conveniency of a level road to the sea, which is usually at no great distance; by means of which, the produce of the country might easily be emitted, and the goods they might want from abroad be brought to them with the greatest facility.

On each side of these straths the mountains ascend to a great height, rising from the plain with a very considerable angle of elevation, being only accessible by flocks and herds, or the wild animals

animals of the desert ; so that it is a matter of very great difficulty to form a passable road directly from the one to the other ; the only free access to each being by the sea : so that those who want to pass from the one to the other are under the necessity of going along their own valley towards the sea, and after having turned the cape, if we may so name the head-land that divides them, returns through the neighbouring strath, upon level roads. On this account it can never be an agreeable place for those who wish to fly through a country in a post-chaise, which makes it but little attended to by modern travellers ; but if it is commodious for the inhabitants, this inconvenience may be easily dispensed with.

From the hills on each side of these straths descend innumerable rills, streaming from rocks, o'erhung with shrubby brushwood ; which gives a convenient opportunity of erecting whatever kind of mills may be necessary, and of carrying on every kind of manufacture that may require the assistance of running water. And as fine turf, or peat, abounds in every corner, the inhabitants have every thing that is necessary for carrying on the woollen manufacture in all its branches to the utmost perfection : nor would it be difficult to supply them with coals from the coast, should that be found necessary.

From this singular conformation of the country arise many consequences that have not been as yet remarked.—And by attending to it, we shall be able to explain, in a satisfactory manner, several peculiarities remarked by travellers, that tend to perplex the mind of the uninformed reader.

It is usual for those who wish to form an idea of the degree of elevation of different parts of the country, to look at a map, and observe

observe the course of the rivers, always concluding, that those places are the highest parts of the country where the rivers take their rise. But however just this may be in general, it would be far from giving a true idea of the elevation of many parts of the Highlands. For, however paradoxical it may appear, there is no doubt but the land is there sometimes higher within a small distance of the part where a river empties itself into the sea, than where it first takes its rise; because the mountains sometimes rise to a much greater height above the vallies near the coast, than they do in the inland parts of the country, these hills gradually sinking lower as you recede from the sea, so as sometimes to descend almost to a level with the plains in the internal part of the country.

And although it is certain, that the bed of the river must always be higher at its source than at its mouth; yet this declivity is in many places so inconsiderable as to amount only to a very few feet in several miles. So that although the small rills that descend by a short course from the mountains are rapid to an astonishing degree, the large rivers for the most part are smooth and gentle in their course. This is the reason, that when a sudden rain falls, the waters pouring down from the mountains on each side with great impetuosity, soon fill the bed of the river, which flowing more gently forward, cannot give it vent so quickly as it comes to it; — so that, like the Nile in the level plains of Egypt, the river overflows its banks, and fills the whole valley from side to side; appearing rather like a sea than a river. And, like the Nile too, being gentle in its course, it leaves a rich slime behind, that greatly fertilizes the meads on each side the river; which by a little industry properly to draw off the returning waters, would form as rich pasture-fields as any in the world. But

as these fields are liable to be overflowed at all seasons, they ought to be applied to pasturage alone; although the inhabitants too often at present attempt to turn them into corn.

You will probably be much surpris'd to find me give such a different idea of the rivers in this country from what you have ever been accustomed to hear; and probably may produce as an exception the river Spey, so much noted for its uncommon rapidity. You will, however, advert, that I speak here *in general*, and do not deny that examples of the contrary may sometimes be met with; but they are rare.—Nor will the Spey be readily admitted as a proper one.—Towards its mouth, indeed, this river is extremely rapid, and continues so for some miles up the country; — but beyond that it differs not from other Highland rivers, flowing on with a calm and sluggish motion. As a striking proof of the level direction of this river in the upper part of its course, I shall only observe, that near Inverishie, some miles above Castle Grant, the river passes between two great rocks, which approaching pretty near together at one place, confine it into a narrow channel, so as to form a sort of cataract when the river is much swelled with rain; — but as this interrupts the course of the water a little at these times, the river is made to stagnate backwards for several miles, overflowing its banks on every side, and forming a temporary lake of very great extent; which, from a small island in the midst of it, has obtained the name of *Loch Insh*; *insh* you know being the common Scotch word for a small island.

It is, therefore, a general rule that admits of few exceptions, that the large rivers which flow through a considerable tract of country in the Highlands are not of a rapid course; and that, on the con-

trary, the smaller rivers that run but for a short way, are rapid almost beyond conception, frequently shooting over rocks of a prodigious altitude, and forming cascades of amazing beauty when rain falls in abundance; — but during the dry weather in summer they are mean and inconsiderable. — This distinction between the different kinds of rivers, ought never to be lost sight of by those who want to form a proper idea of that country.

It sometimes happens, however, that these furrows, as we have termed the hollows between the hills, are interrupted in their course before they reach the sea, by some rock or other impediment running across the valley, which stopping the current of the river, makes it regorge backwards, forming a lake that fills the whole valley, till the surface of the water in it, rises to the same level with the top of the object that bars the valley; over which the river at length forces its way, and usually flows from thence with a current more rapid than is common towards the sea.

And as these vallies are usually very narrow, and of great length, the lochs assume the same form, running backwards till the bottom of the valley comes to be above the level of the water. These, therefore, will be long in proportion to the height of the obstructing bar, and the horizontal position of the bottom; so that, on account of the general flatness of the country, these lochs are usually of very great length in proportion to their breadth; — a circumstance which could not happen, were the general slope of the country considerable in any direction.

The most remarkable of these lakes is that called *Loch-Ness*, which occupies, for twenty-four miles in length, one of the most remarkable

able furrows of this kind in Scotland, which runs quite across the island. The west end of it being deeper than the surface of the sea, and without any bar, extends quite into the Atlantic ocean, forming that long and narrow inlet called *Loch-Oyl*,—that part of the furrow at the west end of Loch-Nefs being filled up for a short way by some low earth; but it soon sinks again into another basin of considerable length, called *Loch-Lochy*, which is only prevented from joining Loch-Oyl by a small low bar that rises near Fort William; nor is either it or the bar that separates Loch-Nefs from the sea at the east end, elevated to any considerable height above the level of the sea.

Another of the same form, and nearly of the same length, is called *Loch-Shin*.—Numberless others of the same kind, although of less note than these, might be mentioned, which it would be tedious here to enumerate. I have only taken notice of them here to induce you to remark, of what infinite benefit these would be to the country in facilitating the carriage of weighty goods through it, should extensive manufactures ever chance to be established among them; because from each of these lochs, other straths branch off, running still farther into the heart of the country, and terminating in this as their common centre.

Such is the situation of these countries, so little known to other nations, and so seldom surveyed by the discerning eye of philosophic attention. To a man who had a full idea of the vast importance of the advantages that might result from the particular formation of these countries, I cannot think of a picture that would afford more pleasure, than an accurate terrestrial chart (if I may use that term) and map of that country, on which should be delineated the courses of the several rivers, with their

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corresponding straths, and circumjacent mountains; marking all along the course of the rivers, the elevation above the level of the sea, as well as the altitude of the several ridges of mountains around them, in the same way as the sounding on a sea-chart are marked. How often have I traced in my own mind the idea of such a chart! — how often wished that it might be executed! — But, in my humble sphere, you know an ineffectual wish is all that can be expected.

This hydro-geographical sketch of the country was necessary, to enable you to form a distinct idea of the manifold advantages that it enjoys for carrying on the woollen manufacture, which you will now be able to perceive with the greatest facility.

You will have remarked already, that whatever advantage the parish of Hallifax possesses, in consequence of the abundance of running water, is enjoyed in an equal, if not superior degree, through all that country.

Their fuel is in equal abundance, and as easily procured; many of the hills being covered with inexhaustible stores of fine peat, which might be easily brought down to their several habitations.

With respect to provisions, the advantage is greatly in favour of Scotland. For there, beef and mutton could at all times be had in prodigious abundance; and, on account of the remoteness of their situation, at a much lower price than in Yorkshire. Potatoes and garden-stuffs of all sorts could be reared to the greatest perfection, and in great abundance, at a small expence; the soil, although steep, being in many places exceeding fertile, and at present of hardly any value at all. — The neighbouring

seas

seas and lochs swarm with the finest fish of all sorts, which could be caught at all seasons, and sold to the inhabitants at a price that would be reckoned nothing at all in almost any part of England *. And oat or barley meal, the only kinds of grain at present used by the inhabitants, could be obtained by sea from the neighbouring low countries of Scotland or Ireland at a very moderate price.— On all which accounts it must be allowed, that the inhabitants might live at a much smaller expence than in Yorkshire, an advantage of no small importance to a manufacturing part of the country.

But the circumstance in which these countries have the most decided advantage over Yorkshire, and perhaps every other part of the world possessing the other advantages they enjoy, is the facility of carriage, not only for their manufactures and provisions, but for their raw materials of every sort ; together with the choice of markets that they would enjoy on this account. For, as few of these places are above ten or fifteen miles from some of these arms of the sea on either side, or fresh-water lochs, to which they could always have access by plain and level roads, every article they had to

* From the month of January salmon are caught in vast abundance in every river there, and are often sold for a penny or three halfpence per pound fresh taken. — From August till the middle of December herrings are caught in such abundance on all the arms of the sea on the west coast, as to be sold from a halfpenny to a penny per score.— Haddocks and whittings are caught in vast abundance at all seasons, and are the largest and best that are seen on any coast ; but a fish called *Seys* are still more abundant than either of these.— Cod and Ling swarm on the west coast, and could be caught in any quantities, were there a constant market for them fresh : —but their climate is not the most favourable for drying these large fish ; — the only way that the inhabitants of these coasts can dispose of them at present.

buy or sell in any part of the world, could be transported at an expence scarce perceptible.—And as some of the friths on the east coast run up so far as to be within a few miles of meeting others on the west, the road between the two being carried through a level strath of only eight or ten miles extent *, they could have it in their choice to send their goods either to the eastern or western markets ; and thus, by an easier and safer navigation than from the Humber, could ship their goods for the Baltic, Germany, or Holland ; and with equal facility to Spain, Portugal, Italy, the Levant, or North America ; so that they are open to either sea, can take advantage of every wind, and have it in their power to trade to any country on the globe.

This could even be done almost in the present situation of affairs. But if commerce had introduced opulence among the inhabitants of these regions, there might easily be opened different modes of communication between distant places, by means of the lakes and level straths, that have not as yet been dreamed of.

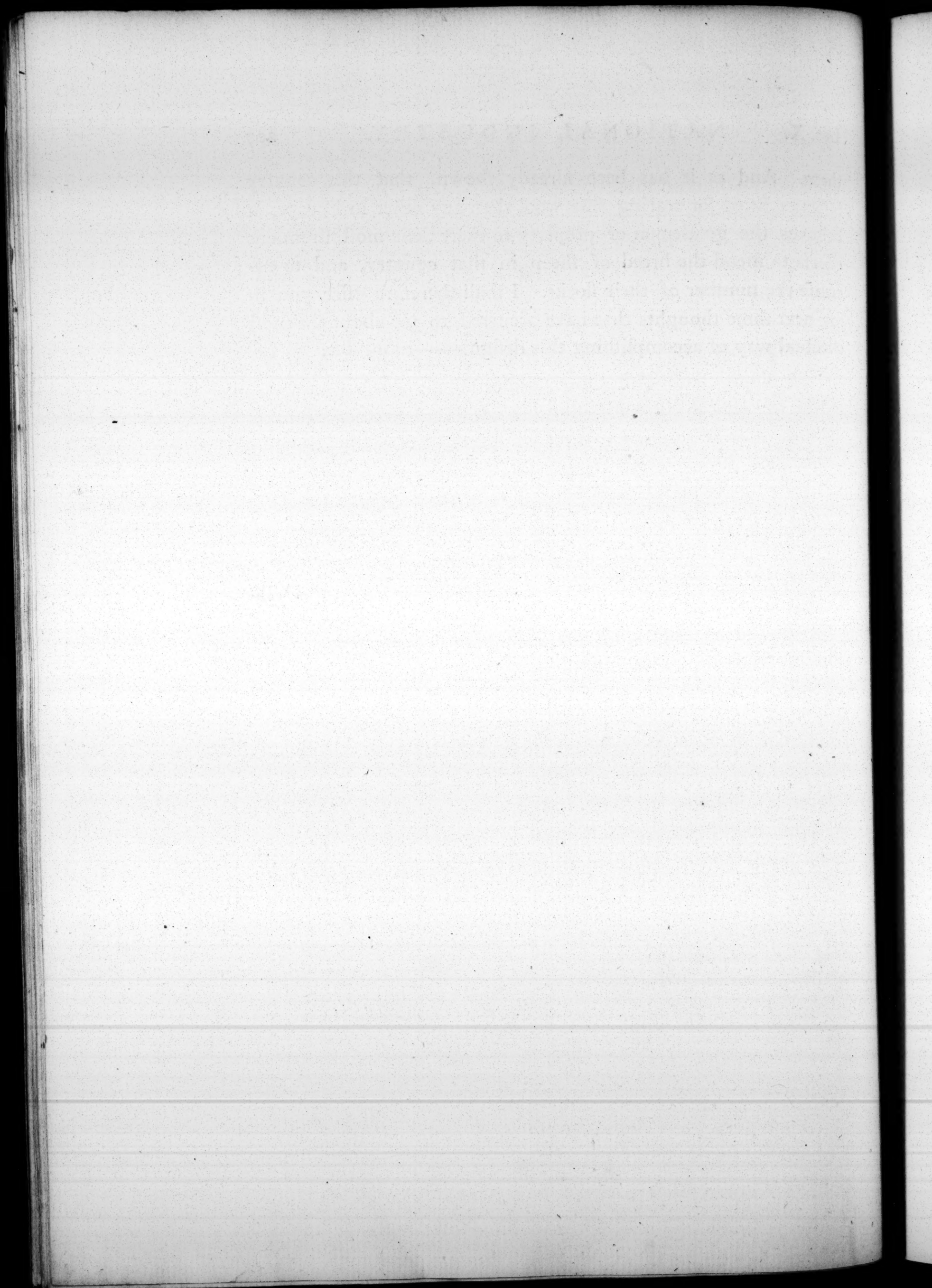
But although they should be possessed of even greater advantages than these, if greater could be, for the reasons that have been already alledged, unless they shall be possessed of wool of their own in abundance to keep their manufacturers employed, it will be difficult to establish a flourishing manufacture among

* This is particularly the case between Loch-Nefs and Loch-Oyl, situated between the frith of Dornoch and Loch-Broom, and, although at a little greater distance, between the head of the bay of Cromarty at Dingwall, and the west coast. Roads are not yet made in other places.

them.

them. And as it has been already shown, that this country is better fitted for rearing fine wool than any other in Europe, it behoves the gentlemen of property to exert their most strenuous efforts to mend the breed of sheep in that country, and to encrease the number of their flocks. I shall therefore offer you in my next some thoughts that have occurred to me about the most effectual way of accomplishing this design.—I am, &c.

O B-



O B S E R V A T I O N S

O N

N A T I O N A L I N D U S T R Y.

L E T T E R E L E V E N T H.

D d

C O N T E N T S.

As Scotland is so well adapted for rearing fine wool, and carrying on the woollen manufacture, a plan is here pointed out, by which the breed of sheep, and quality of the wool, might be effectually improved.—A society for this purpose proposed.—Hints as to the most likely means of making their efforts prove effectual.—High premiums proposed to be given for rearing or introducing fine rams,—and other sorts of fine sheep.—Explanations.—A fund for this purpose might be easily raised.—Scotland more favourable for introducing an improvement of this sort than England.—The present time peculiarly calculated for favouring the attempt.—Way in which the woollen manufacture might be introduced with the smallest trouble or expence.—This manufacture could be more easily introduced into the Highlands and other parts of Scotland than any other,—and why.—The British legislature have adopted improper ideas with regard to the commerce of wool for a century backwards.—English wool much inferior in quality now to what it formerly was.



O B S E R V A T I O N S

O N

N A T I O N A L I N D U S T R Y.

L E T T E R E L E V E N T H.

To Mr ***** London.

DEAR SIR,

November 6. 1775.

ACCORDING to my promise, I now proceed to offer some observations on what appears to me the most effectual plan for encouraging the growth of good wool in Scotland.

As there can be no doubt that the different breeds of sheep continue to propagate their own kind so long as they are kept from intermixing with others, and produce a change in the qualities

lities of any other breed with which they may be associated, in proportion to the communication they may have had with them; and as one male is sufficient for a great number of females; it is plain, that if all the bad rams in any district were destroyed, and others of a better kind were introduced in their stead, the lambs would be considerably improved. And if care were taken still to provide fine rams for these young ewes, the breed would be still farther mended; so that, after a few generations, the race would become nearly as fine as the rams; as they would improve in a geometrical progression, even without any change at all of the ewes. But as good rams cannot be brought from any considerable distance but at a very great expence, even this easy improvement cannot be expected to become of general service, unless some strong public encouragement is given to the importers of these. Nor do I know any occasion in which premiums could be distributed with a greater prospect of success than in the present case; because, if by this means a good breed of sheep should be once introduced in general throughout all this country, they would continue afterwards to propagate their own kind without any care or trouble; so that a permanent effect would be produced from a temporary exertion. But if we wish that these effects should be great, the exertion must be spirited.

Some years ago, a number of public-spirited gentlemen in this country entered into an association, and instituted a society, for encouraging arts, sciences, and agriculture in Scotland. But unluckily their views were too extensive, and their efforts having been divided among such a multiplicity of objects, became feeble, and their effect imperceptible; so that many of the members finding little good to result from their institution, gradually withheld their contributions, and the society was dissolved. But if they

they had confined their views to a few particular objects that were naturally susceptible of improvement by means of premiums, it is not to be doubted but their efforts might have been attended with success. We must concentrate our efforts, if I may use that phrase, and bring them to operate with powerful influence within a narrow sphere, if we hope to produce any powerful improvement by this means. In vain may we hope that a piece of metal will be melted by the continued natural heat of the sun acting on it for any length of time; but if we concentrate his rays to a point, that will be effected in an instant which never could have taken place if they had continued to act separately for all the successive ages of time. In like manner, immense sums may be thrown away in feeble and unavailing attempts to promote improvements continued for ages, which might have been at once effected at a thousandth part of the expence by one intense and uninterrupted effort.

As nothing can promise to be of greater utility to the public in general, or a more certain advantage to men of landed property in this part of the island, than the introduction of the woollen manufacture into it, I would propose, that a voluntary subscription should be opened, and a society formed of such subscribers, for the sole purpose of encouraging the growth of wool, and introducing and properly establishing the woollen manufacture in Scotland: Each subscriber engaging to continue the annual payment of whatever sum he chose to specify, for at least ten years certain: The money to be distributed by a committee to be elected by the members in such manner as should be approved of by the society, according to laws that they themselves should agree to.

If a scheme for this purpose were properly digested, and adopted

ed by some men of influence in this country, I make no doubt but a sum altogether sufficient for this purpose could be raised by voluntary contribution; although other means might perhaps be fallen upon to assist them, if it should be found necessary.

Let us suppose, then, that such a society was instituted, and that their funds were found sufficient for the purpose intended; the premiums under-mentioned, to be distributed annually for ten years certain, would, according to my humble apprehension, produce a most amazing effect.

For the greater facility in distributing the premiums, and that no part of Scotland might be exempted from the influence of them, it would be proper to divide it into four districts, each of which should be entitled to its own class of premiums.

The first district might comprehend all the South part of Scotland; being bounded on the north by the friths of Forth and Clyde, and the great canal that joins these together. The capital of this district might be Peebles.—To be called *the district of Peebles*.

The second district might comprehend the West Highlands; being bounded on the south by the great canal, on the east by the great road leading from Edinburgh to Inverness, and on the north by Loch-Ness and Loch-Yel, and a line drawn between these two, including the isles of Mull and Coll, and all the other islands to the east of these opposite to this district. The capital of this district to be *Taymouth*.

The third district might include the Eastern parts of Scotland
between

between the friths of Forth and Murray ; being bounded on the west by the great Highland road aforesaid. The capital of this district to be *Kincardine O'Niel*.

And the fourth district to include all the Norther parts of Scotland, with the remaining islands to the west and north. The capital to be *Dingwall*.

These divisions, or others that might be judged better, being once established, it would be proper for the society to come to a determination what sort of sheep it would be best to encourage most in each of these districts, and to publish their premiums accordingly. But as fine carding-wool is much more wanted in this island than combing-wool, and will always be in greater request, it would probably be reckoned most eligible to give the greatest number of premiums for the encouragement of it. And as the sheep in the north of Scotland at present carry shorter and finer wool than in the south, let us suppose, that it was resolved to encourage the growth of short wool in the three northern districts, and that of combing-wool only in the first.

According to the ideas already explained relating to the efficacy of premiums, I am of opinion that less than the following would not produce the desired effect ; but if these were regularly distributed, and continued for a sufficient length of time, I have not the smallest doubt, but as fine wool, or perhaps finer, would be produced in Scotland, than is found at present in any part of Europe, or perhaps the whole world.

Pre-

*Premiums proposed for encouraging the growth of fine wool in Scotland.**First Class of Premiums.*

For the best Ram, the property of any person within the first district, or that of Peebles, two years old, carrying the greatest quantity of long combing-wool in proportion to its size, of the finest staple and best quality, - - - - L. 100

For the second ditto, - - - - 50

For the third ditto, - - - - 25

For the fourth ditto, - - - - 15

For the fifth ditto, - - - - 10

For the sixth ditto, - - - - 8

For the seventh ditto, - - - - 6

For the eighth ditto, - - - - 5

For the ninth ditto, - - - - 4

For the tenth ditto, - - - - 2

Total, - - - - L. — 225

Second Class of Premiums.

For the best half score of Ewes, two years old, the property of any person within the district of Peebles, which have the finest and best fleeces of long combing-wool; - - L. 50

For the second ditto, - - - - 25

For the third ditto, - - - - 15

For the fourth ditto, - - - - 10

For the fifth ditto, - - - - 8

For the sixth ditto, - - - - 6

For the seventh ditto, - - - - 5

For the eighth ditto, - - - - 3

For the ninth ditto, - - - - 2

For the tenth ditto, - - - - 1

Total, - - - - L. — 125

Let. XI. NATIONAL INDUSTRY.

217

Brought forward

L. 35°

Third Class of Premiums.

For the best score of Ewe-Lambs, that have been bred by, and are the property of, any person within the district of Peebles, carrying the finest and best fleeces of long combing-wool,

	L. 50
For the second ditto,	25
For the third ditto,	15
For the fourth ditto,	10
For the fifth ditto,	8
For the sixth ditto,	6
For the seventh ditto,	5
For the eighth ditto	3
For the ninth ditto,	2
For the tenth ditto *,	1
Total,	L. — 125

Fourth Class of Premiums.

For the five best Ram-Lambs, that have been reared by, and are the property of, any person within the district of Peebles, carrying the finest and best fleeces of long combing-wool,

	L. 50
For the second ditto,	25
For the third ditto,	15
For the fourth ditto,	10
For the fifth ditto,	8
For the sixth ditto,	6
For the seventh ditto,	5
For the eighth ditto,	3
For the ninth ditto,	2
For the tenth ditto,	1
Total,	L. — 125

Amount of premiums distributed to the district of Peebles, L. 600

The

* One of the principal reasons for advertising premiums for lambs, is, that

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The rams to be produced at Peebles upon the last Wednesday of May each year, to be there inspected, and the premiums determined by proper judges appointed by the society for that purpose; and the ewes and lambs on the Thursday after.

The proprietors of the sheep that gain any of the premiums in the first or second class, shall give bond for L. 500 Sterling, to be forfeited by them, if these sheep shall be, with their knowledge or consent, carried out of that district for at least one year after the premiums are gained, unless in the case afterwards excepted. And the gainers of any of the premiums of the third and fourth classes, shall also give bond for L. 500 Sterling, to be forfeited if these sheep shall be voluntarily carried out of the district for at least three years afterwards, unless in the case excepted. And to ascertain the identity of the sheep, the judges shall cause them to be marked each class with their own particular mark. And in case of the death of any of these sheep, the proprietor shall show the carcase to the minister of the parish, or the nearest justice of the peace; whose attestation will be accepted of for recovering the bond. And in case of any of them being stolen or amissing, the attestation upon oath of the shepherd who kept them, before a justice of the peace, that to the best of his knowledge, the sheep so amissing were either lost or stolen, and not sold or otherwise disposed of by his master, together with the oath of the

that being chosen at this age, it is probable, that if all other circumstances are equal, those which were in best order would be picked out of each flock by the respective owners to whom they belonged. And as the lambs of such ewes as give most milk will usually be in best order at this season, there would be a chance that the breed of this kind of sheep would be in general preferred for breeding from, and thus be more encreased than any other sort.

master,

master, if called for, shall entitle him to retire his bond, unless a proof can be brought of their having falsified their oath.

This clause to be always understood with regard to the other classes of premiums where bonds shall be granted.

In the same manner let four classes of premiums be assigned for each of the other three districts, the same with these in every respect, excepting that the premiums are all assigned for sheep carrying short carding-wool. The sheep to be showed at Taymouth on the first Wednesday of June; — at Kincardine O’Niel the second; and at Dingwall the third Wednesday of the same month; — the ewes and lambs on the following Thursday at each of these places respectively. By which arrangement the judges could go round their circuit without any sort of inconvenience.

But as it might happen, that some persons might raise long combing-wool in the Northern districts, or short wool in the Southern one, — that these might have an equal chance of having due encouragement, and that a spirit of emulation might be excited between the different districts, as well as to ascertain with the greatest possible precision the most valuable sheep in the whole country, it would perhaps be proper to distribute the two following classes of premiums, — the number of which, if all the others had been marked, would have been as under.

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The Seventeenth Class of Premiums.

For the best Ram of the long-wooled sort, the property of any person in Scotland, without any limitation as to age, carrying the finest and best fleece,

	-	-	-	-	-	L. 200
For the second ditto,	-	-	-	-	-	100
For the third ditto,	-	-	-	-	-	50
For the fourth ditto,	-	-	-	-	-	25
For the fifth ditto,	-	-	-	-	-	15
For the sixth ditto,	-	-	-	-	-	10
For the seventh ditto,	-	-	-	-	-	8
For the eighth ditto,	-	-	-	-	-	6
For the ninth ditto,	-	-	-	-	-	4
For the tenth ditto,	-	-	-	-	-	2
Total,	-	-	-	-	-	L. — 420

The Eighteenth Class of Premiums.

For the best Ram of the short-wooled sort, the property of any person in Scotland, without limitation as to age, carrying the finest and best fleece, L. 200

For the 2d,— 3d,— 4th,— 5th,— 6th,— 7th,—
8th,— 9th, and 10th,— as above,— in all, 220

Total, L. — 420

The gainers of the two highest premiums in either of the two classes above mentioned, shall give bond for L. 1000, and the gainers of all the inferior premiums of each of these classes shall give bond for L. 500 Sterling, that the sheep which gained the premium shall not, with their consent, be carried out of Scotland, for one year at least after the premium shall be adjudged to them.

And

And if any of these shall have gained any of the other classes of premiums, their former bonds shall be rescinded, and (the owner nevertheless retaining both premiums) the proprietor be at liberty to carry them to any of the districts he may think proper.

The sheep to compete for these two classes of premiums to be showed at Perth on the fourth Wednesday of June; and it shall be reckoned no breach of bond for any person who has gained a premium in any of the foregoing classes, to carry their sheep to Perth with a view to compete for this premium, if they be again returned to their respective districts with all convenient speed.

As a still greater inducement to excite the attention of the farmer to rearing fine wool, if the funds were found to be sufficient for it, the two following would be of great utility.

Nineteenth Class of Premiums.

For the finest fleece of short carding-wool approaching to the quality or excelling that of Spain or Persia, that has been cut from any sheep the property of any person in Scotland,

	-	-	L. 100
For the second ditto,	-	-	50
For the third ditto,	-	-	25
For the fourth ditto,	-	-	15
For the fifth ditto,	-	-	10
For the sixth ditto,	-	-	8
For the seventh ditto,	-	-	6
For the eighth ditto,	-	-	5
For the ninth ditto,	-	-	4
For the tenth ditto,	-	-	2
Total,	-	-	L. — 225

Twentieth

Twentieth Class of Premiums.

For the finest and best fleece of long combing-wool,
 approaching to, or excelling the best English wool
 of that sort, that has been shorn from a sheep the
 property of any person in Scotland, - L. 100

For the 2d,—3d,—4th,—5th,—6th,—7th,—
 8th,—9th,—and 10th ditto,—as above,—in all, 125

Total, L. ——— 225

The competitors for these two classes of premiums shall send the respective fleeces, each in a bag sealed up, directed to Mr ——— at Edinburgh, before the third Wednesday of August each year, when the judges are to inspect them. Along with each fleece let an attestation be sent, signed by the parson of the parish where the fleece was produced, or a justice of the peace, and two witnesses, importing, that they saw the fleece shorn from a sheep in the possession of, and to the best of their knowledge belonging to, such a person (here giving the name and designation of the person whose property it was at shearing-time, with a note in writing from the owner himself, acknowledging that the sheep from which the fleece was shorn is his property); and let this packet be sealed up in the presence of the attesting parson, or justice of the peace, and sealed with their respective seals, along with that of the owner, and inclosed within the larger bag along with the fleece: the small packet not to be opened till after the premiums are adjudged; nor any of the bags or packets to be opened on any account but in the presence of the judges.

The fleeces which obtain the premiums in these two classes to remain

remain the property of the society : the first of each class every year to be laid up and properly secured in a repository set apart for this purpose, with a view to remark in future times the comparative fineness of the wool of Scotland at different periods ; and the next best to be manufactured into some sort of manufacture that they are best fitted for, by the most skilful manufacturers that can be found in the country, at the expence of the society, to be also laid up in their repositories, that posterity may observe the gradual advancement of the skill of the manufacturers also.

I doubt not but you will think these premiums are very high. I think the same ; but I think it is necessary they should be so, if we want to excite a general spirit of emulation among all ranks of people, and turn their attention strongly to this object ; and unless we do this, we may be said to do nothing at all. Without a very great prospect of being amply rewarded for the immense trouble of procuring and bringing exceeding fine sheep from distant countries, it is not to be expected that this would be at all attempted : but with the temptation that this series of premiums would afford, it is hardly possible to say what bounds could be set to the efforts of enterprising individuals. The fine-wooled sheep that may be in Scotland or England, would be selected with the utmost care, and treated with the utmost attention.—The finest sheep in Spain would quickly be brought hither ; the Tartar hordes would be explored, and their most valuable treasures brought to our shores ; even Persia, and Thibet itself, would be ransacked for this purpose, and the most valuable sheep from every part of the world be brought to our island, and every art that could tend to meliorate the quality of the wool be searched out with the most prying curiosity.

And

And what would be the amount of the mighty sum necessary to produce all these great effects? Even if the whole were paid as above, it would amount to no more than L. 3690,— which, if equally divided among all the men of landed property, it is believed would not amount to more than two shillings or half a crown on the hundred pounds Sterling of real land-rent in Scotland; at any rate, it could not amount to one twelfth part of the land-tax when at four shillings in the pound in England. This is such a very trifling sum, that were the subscription any thing like universal, more than ten times its amount might be raised without being sensibly felt, even although no other aid could be obtained: but as the Honourable board of Trustees for encouraging manufactures in Scotland, do not scruple to give annually a sum nearly equal to this for encouraging the linen manufacture, it is hardly to be doubted but they would assist this likewise if a proper application were made to them. Our gracious Soveriegn himself might probably be induced to assist by his royal bounty such a public-spirited undertaking, by which so many of his subjects would be so highly benefited, should it ever be found necessary. But for the trifling sum mentioned above, or even double that, I should think it a reflection upon the landed gentlemen in Scotland to require any assistance, or even to accept it from any one, were it not voluntarily offered as a public mark of approbation of their plan in those who gave it.

If by means of these premiums, and other correspondent encouragements that might be given, a fine breed of sheep were once introduced into Scotland, the amount of these premiums might be very much diminished, although it would be prudent always to continue something of that sort, to be a spur to the emulation of individuals. But a hundred pounds *then* would be

as efficacious as a thousand *now*; so that should the society continue, they would be enabled to apply their funds to other plans of improvement that might then be discovered to be necessary.

If the gentlemen in Scotland should resolve to adopt some such plan as that here recommended, they could put it in execution with much greater facility than almost any other people on the globe; and circumstances seem to have taken such a turn at present, as clearly to indicate that all matters are just now ripe for the execution of such a grand national improvement. The number of sheep is yet but small in proportion to what they ought to be; and as many judicious persons seem to be now become sensible of this, and are therefore beginning to encrease their flocks,—now, if ever, is the time to introduce a valuable breed; because it is much easier, by a little well-timed attention, to get them good at first, than to correct their defects after the number has become very great.

In this respect any attempts of this sort might be expected to succeed much better in Scotland than they could do in England; and as the fleece would bear a much greater value in proportion to its carcase in most parts of Scotland than in England, this would be another strong inducement in the inhabitants of the former to bestow a much greater attention to this article, than the others could ever be prevailed on to do.

And if we add to this, that Scotland is possessed of so many small islands and holms, upon which any particular breed of sheep could be kept with the greatest certainty from intermixing with any others, we could by means of these have the best opportunities of making any experiments that might be necessary to

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ascertain

ascertain the comparative value of any two breeds with the utmost precision; and when we had once obtained the most valuable sort, they could be kept perfectly distinct from others for any length of time; which might serve as a perpetual nursery for recruiting the flocks on the main land, where they would necessarily be more liable to degenerate.

These are circumstances that ought not to be overlooked, and strongly point out the present time as the most favourable that can ever be expected for carrying this salutary plan into execution.

There occurs to me only one strong objection to the plan of improvement here proposed, viz. the difficulty of procuring judges who should be able to distribute the premiums with strict propriety. Gentlemen who have not made that a particular study, will hardly be ever able to attain that accuracy in distinguishing the different degrees of fineness of wool that a professed wool-sorter possesses; — and all mankind are so apt to take a particular bias in matters of this sort, for some particular breed of sheep, that there is great reason to fear, that the judge might often be biased, without intending it, so as to favour in some cases a particular sort, beyond the degree that it strictly deserved. — All that can be done in such a case, is to guard as much as possible against this.

But nothing can so well ascertain the intrinsic value of any article of commerce as a free and open market, where the purchaser will always prefer what suits his purpose best, and give the highest price for the most valuable sort, and where the vender will at all times be induced to prefer that particular line of conduct that

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on the whole turns out most to his own profit, so as quickly to correct any unreasonable bias he may at any time have adopted.

When fine wool should by these means come to be reared in abundance in Scotland, it would be high time to think of introducing the woollen manufacture on a large scale, and of extending it over the country.—But before that period it would perhaps be prudent not to grasp at too much. A few sensible men who understand that branch of business, ought to be encouraged and supported: for in the beginning of any new manufacture such support is always necessary, even where materials can be had at the lowest price; because the operators must always be awkward, and their wages high, with other troublesome circumstances too tedious to enumerate, which gradually disappear after the manufacture has been established for some time.

It would likewise be prudent in these circumstances to confine our chief efforts towards manufactures of a coarser sort, than to attempt those of the finest kind at the beginning:—for as the operations relating to these last are of the most delicate sort, they have less chance of being performed with accuracy at first, than after the operators have gradually improved themselves by long practice in a coarser manufacture of the same kind; and as these fine cloths are chiefly to be worn of people of high rank, who always aim at elegance in their apparel, a small deficiency in this respect will be less apt to be overlooked in these fine kinds of cloth, than it would be in cloths that were rather purchased for utility than show. Add to this, that the demand for these serviceable cloths must always be more considerable than for the others, if they are sold at a reasonable price, and I think the balance will be much in their favour at first.

In the mean time, every method ought to be taken to procure able manufacturers in all branches, as circumstances might occur, — by watching opportunities when any accidental stagnation of trade throws these out of employment in England, — as well as by sending young men of good talents to serve an apprenticeship in the best manufacturing towns in England ; — but above all, by obtaining a sufficient number of experienced wool-forcers, without which, no woollen manufacture can be properly established ; and by instructing the women of the country as soon as possible to spin with neatness and accuracy, which is a matter of the highest importance. — And after they are once initiated into the practice a little, a very small sum applied judiciously in premiums, would produce a wonderful effect.

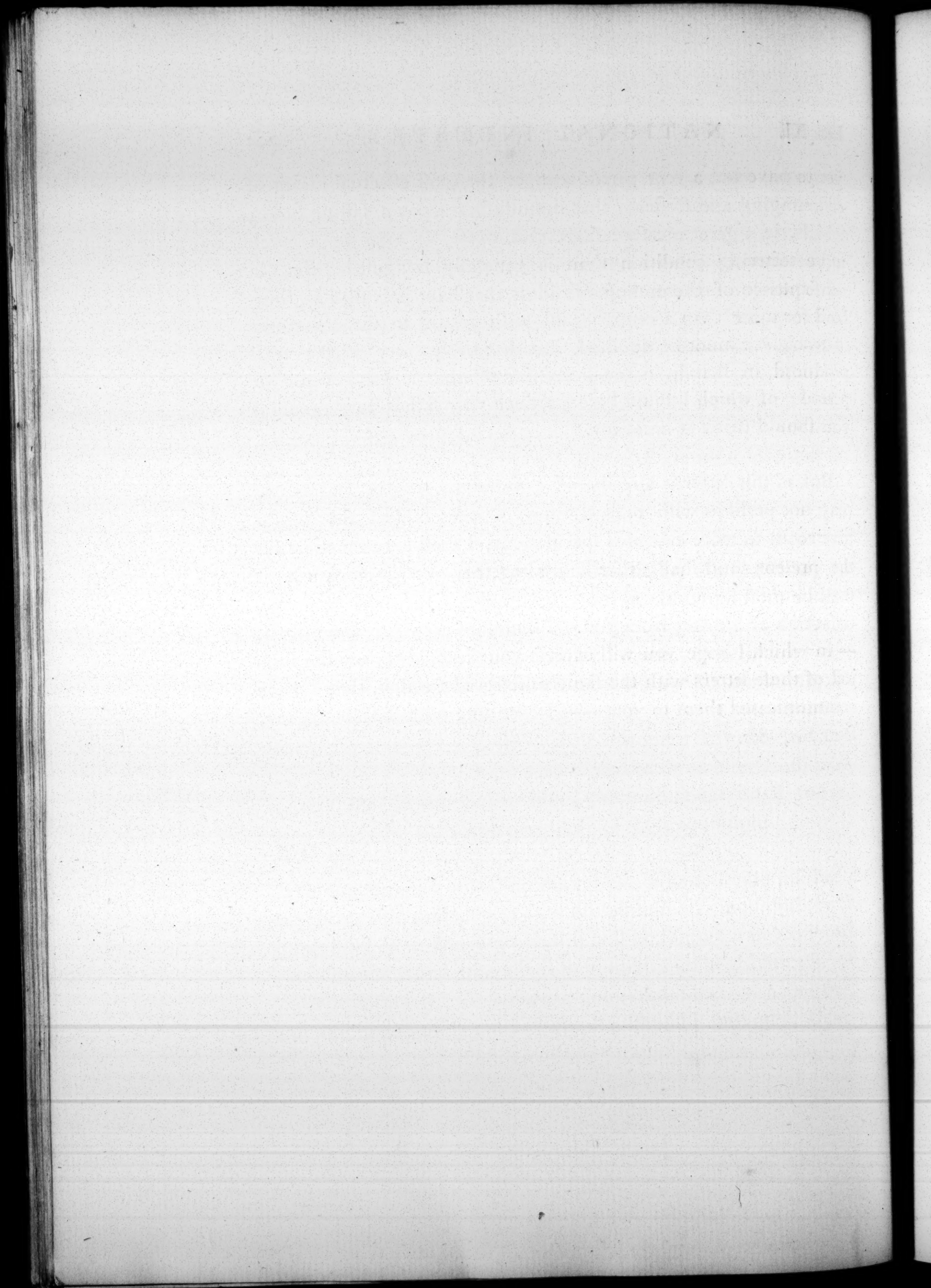
It likewise well deserves to be noted here, that no other new manufacture could possibly be attempted with the prospect of meeting with so few obstructions in Scotland as the woollen manufacture ; as there is hardly a woman who has been bred in the country, between Solway frith and Johny Groat's house, who cannot spin wool in some sort ; especially in the Highlands, where this is, and always has been their favourite manufacture, and where they at present work tartans and other woollen stuffs with a neatness that is indeed surprising, considering the small convenience they have for performing any of these operations.

In this manner we would provide a constant home market for our wool, and probably lay the foundation of a manufacture that may continue to flourish, when it will be forgotten in many other parts of the island where it is now carried on with success. For the British senate, while their commercial ideas with regard to the production of grain has become liberally enlarged, seem as yet

yet to have but a very partial idea of the most effectual means of encouraging and securing that manufacture upon a lasting basis ; which, in a great measure from this cause, is now in a much more tottering condition than is generally imagined : for, in consequence of the monopolish ideas that have prevailed in England for more than a century past with regard to the commerce of wool, it cannot be doubted, but that the quality of the wool produced in Britain is much inferior to what it was before that period ; of which I could here produce very satisfactory proofs if you should think it necessary.

But as this letter is already of a sufficient length, and as you may not perhaps wish to enter upon a new subject that might give room to more extended speculations, I shall here conclude for the present, and shall either stop altogether, or go forward, as shall be most agreeable to you. It is now long since I had the satisfaction of hearing from you. I therefore expect a letter soon, — in which I hope you will express your sentiments on the subject of these letters with the same unreserved freedom that I have communicated them to you.—— I ever am, with sincere regard,
Dear Sir, &c.

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O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R T W E L F T H.

C O N T E N T S.

Objections to the concluding part of last letter.—Answers.—An historic investigation, by which it appears, that English wool was long in the highest degree of estimation in Italy and the Netherlands:—That it was more esteemed in Italy than Spanish wool:—That in the 15th century it sold at a higher price in the Netherlands:—That it was at least equally valued there in the 16th century.—A review of the wool-trade and woollen manufacture of England from its origin to the present time, shewing the steps by which it gradually attained to its highest degree of perfection under Elisabeth.—Eulogium of that great princess and her ministers.—Repeated attempts of the manufacturers to obtain a monopoly of English wool:—They at length succeed under Charles II. when the law prohibiting the exportation of wool was first in good earnest enacted.—Consequences that resulted from that law:—The price of wool falls; and the number of sheep, in consequence thereof, is much diminished:—The greatest fall of price takes place with regard to fine wool,—and why:—Hence no care has been since taken to improve its quality, the carcase of the sheep having become the principal object of the farmer's attention.—Coarse wool, and the manufactures for the poor, rather encreased in price.—Fine wool thus gradually disappears in England, and it becomes necessary to import and manufacture Spanish wool.—Hence Britain possesses no longer that evident superiority over other nations with regard to the woollen manufacture that she undoubtedly enjoyed in the days of Elisabeth, and is at best but on an equality with other nations as to the manufacture of fine cloth.—Hence the decline of the Turkey trade,—of the trade in woollen stuffs to Sweden, Russia, Prussia, and many parts of Germany.—The precarious footing the British clothing-trade to Spain,—and Portugal.—No prospect of recovering these branches of trade but by rearing fine wool in Scotland.—The Ouling trade in England totally owing to the same ill-judged law against the exportation of wool:—Extent of that illicit trade.—A sketch of the exceeding pernicious tendency of it.—Necessity of repealing that destructive law.



O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R T W E L F T H.

To Mr ***** London.

November 21. 1775.

I THANK you, my dear Sir, for your very obliging packet of the 13th instant, which is now before me. It gives me much pleasure to think that I have had it in my power to contribute to your amusement. The objections you make to what has been said, is to me the most unequivocal mark of your being interested in the discussion that I have entered into; which is a sufficient motive to induce me to do all I can to remove such doubts as may

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have occurred to you on considering this subject, and to afford you all the satisfaction in my power with regard to those other matters about which you are still desirous of being informed.

You seem to be much surpris'd at the hints I gave in the concluding part of my last letter; as these, you say, are so contrary to the general sense of the knowing part of the English nation.—“The woollen manufacture of England in a tottering state:—The British parliament to have adopted monopolish ideas:—The quality of the wool of England inferior now to what it formerly was!—These are ideas so repugnant to the general sense of every British subject, and they are so plainly contradicted by the very flourishing state of our woollen manufactures at present, as cannot be admitted to be well founded without a very satisfactory proof.”

You tell me, farther, that you have conversed with some very sensible people on this subject; and in particular with a very intelligent man, who has made a considerable fortune by the woollen manufacture; all of whom differ so much from me in opinion as to this particular, and produce such strong reasons in support of their own way of thinking, as convinces you that I must be mistaken with regard to it. On which account you desire that I would either give you fuller information as to that head, or acknowledge that I have been hurried away by my partiality to my country in this respect; which you, with your usual good-nature, observe would be a very pardonable error.

This I own is a heavy charge; and might perhaps have alarmed me a little, had I not attended to this subject with a more than ordinary care. But to me it is not in the least surprizing: for I
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do not know a subject that has been more universally misrepresented by political writers, than almost every thing relating to the woollen manufacture has been ; — nor do I know one in which so many errors have been carelessly adopted ; which have been so often repeated by one writer after another as undoubted truths, that it is no wonder if those who are obliged to content themselves with the usual sources of information, should in this case be very much deceived.

Knowing these things, I was neither surpris'd at your scepticism on this head, nor alarmed at the positive confidence of those you have consulted. I should have been well pleas'd to have heard the arguments they made use of to you, that I might have been enabled to return direct answers to them : but as I can guess at the general scope of these, I shall content myself with pointing out a few facts that will be so directly the reverse of many that might probably be mentioned by them, as will serve to encrease your surpris'e a little in one respect.

It is well known, that English wool has been long held in very high estimation over all Europe. But our historians of old were so much employed in relating military achievements, as to neglect the more important history of the progress of civil society, and the advancement of arts and manufactures ; so that we in vain attempt now to discover with certainty the origin or progress of our woollen manufacture, or the time when the wool of England began to be prized among foreign nations. Yet even in the midst of that general obscurity, there are not wanting some circumstances that afford sufficient indications, that the wool of this island was held in great estimation at a very early period ; and

that the woollen manufacture was established in England long before the time that historians usually begin to take notice of it.

The Romans, according to Camden, finding the wool of Britain remarkable for its fineness, established a manufacture of cloths at Winchester, for the use of the emperors. And *Dionysius Alexandrinus*, in his treatise *De situ orbis*, as quoted by Hollinghed, (*Chron. of England*, p. 221.), saith, “*That the wool of Great Britain is often spun so fine, that it is in a manner comparable to the spider’s draught.*” And although, during the troubles in which Britain was involved after the Romans left it, it is not to be doubted that the woollen manufacture declined; yet it still kept some footing in the island, and had made considerable advances towards perfection before the time of Edward III. who is commonly thought to have first introduced that manufacture here *.

Nor

* Fabian remarks of Edward the elder, who died anno 925, that “he set his sons to scole, and his daughters he set to woll werke, taking example of Charles the Conquestour.” *Chron. c.* 179.

Anno 1172, King Henry II. issues an ordinance against making cloth of English wool mixed with Spanish, *Hist. of commerce.* p. 189.

Madox, in his *Firma burgi* observes, that as early as the year 1180, there was in London a lawful guild-fraternity of *weavers*: from whence it is plain, that the cloth-manufacture must have been then established in England. *ib.* p. 70.

1225. In the Magna Charta of Henry III. there is this article: “That there be one breadth of dyed cloths, ruffets, and huberjets; i. e. two yards within the lists.”—Hence it is plain, the manufacture of *broad cloth* had been before that fully established in the island.

1284. Edward I. gave certain privileges to strangers, among which are liberty to export, as follows, viz.

“Wool,—duty 40 pence over the old duty of half a mark.”—Hence it is plain, that the export of wool had been practised of old time.

“Item, Cloth dyed scarlet in grain,—duty two shillings each cloth.”—What is meant

Nor is there any doubt that the wool of England was long greedily coveted by all the manufacturing countries in Europe, and was for many ages a principal branch of our foreign commerce. The Venetians, Florentines, Genoese, and other Italian states, obtained it from hence in the twelfth and thirteenth centuries.—And after the Flemings began their woollen manufacture, and the Dukes of Brabant, from their vicinity, and conveniency for other branches of trade, obtained exclusive privileges with regard to the commerce of wool, many were the particular treaties, and number-

meant here by “scarlet in grain” is not certain: for it is well known, that the colour now called *scarlet*, dyed with cochineal, is a late invention.—Probably this might be the colour made with kermes grains; — but whatever it was, there is no doubt but the woollen manufacture had then attained to a considerable perfection.

“Item,—1 s. 6 d. for every cloth in which a grain colour is intermixed.”—Would not this seem to imply, that that kind of mixed cloth called now *scribled* was then made here? — an invention supposed of a much later date.

“Item,—12 pence for every cloth without grain.” Thus it appears, that England at this early period possessed the woollen manufacture in several branches to perfection, and exported cloths dyed and scribled, as as well as colourless.—How they came afterwards to lose these two first arts, deserves to be enquired into. For it is certain, that, till within this century past, English cloths were always exported undyed, since the woollen manufacture began to be taken notice of by ordinary historians.

I could not omit inserting this note pretty much at large, as it shows how little our historians in general are acquainted with the state of the trade or manufactures of the kingdom; this being upwards of a hundred years prior to the time that they assign for the first introduction of the woollen manufacture into England.

It would seem that the woollen manufacture had been established at a very early period in Scotland also: For, in the year 1393, Thomas Dunbar Earl of Moray granted to the town of Elgin, all the *wool, cloth*, and other things that go by ship out of his harbour of Spey, duty-free. Hist. of Moray, p. 193.

Hence *wool* and *cloth* were such considerable articles of export as to deserve to be particularly mentioned in preference to all others.

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less the embassies of the Italian states to obtain permission to export wool directly from Britain; as may be seen by consulting the statutes,—a few of which for your satisfaction are quoted in the margin *.

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* It has been remarked in the last note, that wool was a common article of export long before the year 1228; — but that it had been a great article of commerce long before that time, is evident from this circumstance, That when Richard I. on his return from the Holy Land anno 1193, was made prisoner by the Duke of Austria, *one year's wool was borrowed from the abbeys of the Cistercian order, and of the religious house of the order of Sempringham, towards payment of the King's ransom.* — Wool therefore must have been at that time a great and staple export of the kingdom, and must have been carried on for ages before that.

1297. K. Edward I. imposed a duty of 40 s. a-sack upon all wool exported. At the same time it was affirmed, that the wool in Great Britain was equal to half the value of the lands in England, Hume, vol. 2. p. 299.—301. The commerce of wool must have been at that time very considerable indeed to give occasion for making such an extravagant computation.

Icenia, Norfolk.— “Hæc ruris pars, ut Occidentis reliqua, pascendis ovibus magnopere exponitur. Pleræque villæ aut unum, aut duo, aut tria, interdum quatuor vel quinque millia nutriunt; ut intelligas *Proceres Angliæ* apud Edw. I. de vectigali lanis imposito conquerentes, consulto affirmasse, *opum regni dimidium in lanis consistere.*” RELIQ. SPELMANIANÆ, (1727), p. 162.

This seems to be the passage alluded to by Hume above, although the assertion here does not appear to be quite so extravagant as he makes it.

1332. *English wool seized at Nice in Provence this year*: so that a trade to England for wool must have been at this time carried on from the Mediterranean, Hist. Commerc. p. 156.

1353. A treaty with the Catalonians — *Liberty granted to buy wool in England.*

1408. At the earnest request of the Doge of Venice liberty granted to export wool from England.

1413. The same liberty granted to them by K. Henry V.

1437. Permission to the King of Portugal to export to Florence 600 sacks of Cotefwold wool.— See hereafter p. 240.

1439. All wools to be carried to Calais; except that for the Straits, on account of

During these early periods little mention is made of the wool of Spain ; and it is to be observed, that the inhabitants of Rouffillon, and Catalonia, which countries now afford finer wool than any

of the merchants of Venice,—Genoa,—Tuscany,—Lombardy, and Catalonia.

1470. A permission granted by Richard II. to a Florentine merchant for 600 sacks,—and 1200 sacks to another.

Another by Edward IV. to carry wool through the straits of Morocco.

1472. Liberty granted to the Dukes of Burgundy to export 50 sacks of wool duty free to the Mediterranean.

1474. Another licence to Laurence, de Medici of Florence, to export wool to the Mediterranean.

1480. King Edward IV. grants a licence to his sister Margaret Dukes of Burgundy to export annually duty-free 2000 rams to Holland, Flanders, and Zealand.

From this circumstance we may plainly perceive, that the Flemings were at this time extremely desirous of having English wool, and made this attempt to improve the wool of their own native sheep.—But the climate would effectually prevent them from ever being able to rear it so fine as it would naturally be in England.

We find still in Zealand and Flanders a breed of large sheep that carry long combing-wool, of the nature of that of Lincolnshire, but coarser, which are probably the descendants of the sheep improved by Margaret.

Some of our historians take notice of a present of rams sent by Edward IV. about this time to the King of Arragon, which it is supposed was the beginning of the breed of fine-wooled sheep in Spain. This improbable story has been greedily swallowed by the English ; although there is not the smallest probability of this having been the case. For before this period the wool of Spain was very fine, and a considerable trade in that article was carried on to the Netherlands. But if the fineness of the Spanish wool was to be ascribed to this cause, the wools of Arragon ought to be the finest, whereas it is notorious that those of Castile are beyond comparison the finest in Spain.

I have in vain endeavoured to find an authentic proof of such a present having been sent to the King of Arragon, and I am convinced that the story has taken its rise from this permission granted by Edward IV. to his sister to export rams to Holland, &c. Such mistakes are by no means uncommon in matters of this sort.

Other

any in Britain were among the purchasers of our wool. It is likewise worth remarking, that Cotswold wool seems always to have been in greatest request, as being most proper for the manufacture of fine cloths, chiefly at that time carried on by the Venetians. But it is well known, that the finest Cotswold wool at present is not proper for making superfine cloths, as all our superfines are made of Spanish wool, without any mixture of English at all.

From these facts it would seem probable, that at that period English wool was not inferior to Spanish. And King Henry II. seems to have apprehended, that the Spanish wool was of an inferior quality to that of England, as he published an ordinance as early as the year 1172 against mixing Spanish wool with English in the

Other historians assert, that Edward received this present of sheep from Spain; and that the fineness of the English wool is to be attributed to that cause. Such are the contradictions to be met with in things of this nature.

1486. Another treaty with the Florentines, and liberty granted to export wool, &c. to Florence, without going to Calais.

1488. Another regulation in favour of Italians, viz. those of Venice,—Genoa,—Florence,—and Lucca, to export wool, &c.

1490. Another treaty with Florence, in which the English are annually to import, at Pisa, as much wool as the Florentines and other parts of Italy (Venice excepted) can work up or use.

600 sacks of wool permitted to the Venetians.

1519. A fresh liberty to the Genoese to export wool, &c. see Anderfon's History of Commerce under the respective years. The only remark I shall make upon all these treaties is this:—That had not the English wool been in high estimation in all the countries of Italy, they would not have submitted to the perpetual trouble of getting new regulations almost every year for favouring this branch of commerce.—It is plain, that the design of all these permissions was to prevent the Italians from being under the necessity of going to Calais or Bruges for the wool, where the staple was by law fixed;—as it was much easier for them to export it directly from Southampton than from the staple in the Netherlands.

manufacture of broad cloth *. From which time we hear no mention made of Spanish wool in the English manufactures for many centuries downwards.

It likewise appears, that as early as the reign of Edward III. English wool was reckoned finer than that of any of the neighbouring states; as we find, that in the year 1338 that monarch issued a proclamation, forbidding, under severe penalties, the exportation of any live sheep from this island, to prevent other nations from improving their wool, and coming into competition with us in the market with that commodity †.

But the circumstance which proves, in the most satisfactory manner, the very high estimation in which Cotswold wool was held over all Europe about that period, is a permission granted by Henry VI. of England to Don Duarte King of Portugal, in the year 1437, to export sixty sacks of Cotswold wool, by means of which he was to procure certain cloths of gold from Florence for the King's (of Portugal) use ‡. At this time Portugal was at peace with the King of Castile, and the two kings in great amity, Alphonso of Castile being married with the sister of the King of Portugal.—So that it would seem the Florentines at that time preferred Cotswold wool to the best of Spain; as the King of Portugal could have procured Spanish wool with less trouble than English, had it been as much valued by the manufacturers.

By another circumstance we likewise have a very strong proof, that English wool was about that period more valuable than Spa-

* History of Commerce.

† Rymer, vol. 5. p. 36.

‡ Anderson's History of Commerce, vol. 1. p. 263.

nish wool. For in the year 1470, a Spanish vessel bound for the Netherlands having been taken by an English privateer, the owners make complaint to the King, and demand redress. On this occasion, among other articles of which the cargo consisted, they mention sacks of wool; which they say would be worth in Flanders L. 4 per sack, each sack weighing one quintal and three quarters. Now as a Spanish quintal is equal in weight to 97 lb. English, the Spanish sack of wool contains $159\frac{3}{4}$ lb. English. At which rate an English sack of Spanish wool, or 364 lb. would be worth no more than L. 9, 12 s. which is below the price of English wool at that time. For,

In the reign of Edward III. the best English wool used to sell in England for about L. 8 per sack *; and, in the year 1343, the parliament fix the prices of wool, the highest being fourteen marks, or L. 9 : 13 : 4, besides the duty, which was never below 40 s. and usually L. 3 : 6 : 8, and sometimes so high as L. 5; so that the price paid by the foreign merchant in England, supposing the duty L. 3, could not be less than L. 12 : 13 : 4. To which if we add freight and commission, merchants profits, &c. we cannot suppose that the price of a sack of English wool at Bruges would be less than L. 13, which is above a third part more than the Spanish merchants value their own wool at, as above; and it will not be supposed but they rated it at the very highest price †.

From

* *Vide* Smith's Memoirs of wool, *passim*.

† I meet with the following note relating to the selling-price of English wool in Brabant, in Rapin's *Acta Regia*, p. 151.

“ And yet in November last (that is 1337) he (Edward III.) had sent the Bishop of Lincoln, and the Earls of Northampton and Suffolk, with 10,000 sacks of wool in-
 “ to Brabant, to make retainers in High Germany; and there at the same time they
 “ sold

From all which circumstances, I think we may fairly conclude, that English wool in the fourteenth century was at least equal in value to Spanish wool.

Nor do we find that in the sixteenth century the Spanish wool had obtained any ascendancy over English wool. For, in the year 1560, Lewis Guicciardin, enumerating the exports and imports to and from Bruges and Antwerp, mentions, among the exports from England, English wool, calling it *lane finissime*; and distinguishes at the same time Spanish wool by the phrase *lane bonissime* *; by which it would seem that *fineness* was the distinguishing characteristic of English wool even at that time. Nor does he on any occasion shew the smallest preference to Spanish wool, but rather the reverse, as he usually mentions English wool before Spanish where he has occasion to mention them together. Thus among the exports to Milan he specifies *English* and *Spanish* wool, &c.

"fold all their wool, every sack for L. 40, which amounted in all to L. 400,000."

The reader may infer what he pleases from this; — but the price appeared to me so high, that I suspect there must be here some mistake. I therefore chose to adhere to more moderate and indisputable facts for fixing the rate of wool in the text.

It deserves, however, to be remarked, that the price of the finest wool in England must at that time have been much above the price fixed by parliament: for this was meant as a price at which every individual might redeem his wool from the King, if he so inclined; on which occasion it is not to be expected that they would fix on the very highest price. It was besides only the average price of a whole county or district that they fixed upon; so that the best wool in that district must of necessity have been much above the regulated price. — Probably the best wool in England might have been then sold for about 14 or 15 pounds at least, which, in Brabant, could not have been afforded for less than 18 or 20 pounds, and may have been much higher on some occasions.

* Guicc. descr. de Paese Bassi. Anversa 1577, p. 122. 123.

And in another place he in exprefs terms gives the preference to Englifh wool when compared with Spanifh. “ Le lane (fays he, p. 10.) del paefe fono groffette, & non hanno che fare di bontà con quella di Spagna, et *manco con quelle d’Inghilterra*.” That is, the wool of the country is coarfe, and is not equal in goodnefs to that of Spain, and ftill lefs to that of England.

And that Englifh wool was in truth more valuable at that time, and was fo eftimated by the fenfible part of the Britifh nation themfelves, appears from feveral paffages below, quoted from the collections of Richard Hakluyt, of the Temple, London,—a moft attentive obferver in the reign of Queen Elifabeth *.

How

* Among many other curious particulars relating to the ancient ftate of the national commerce of Britain preferved by Hakluyt, is a very fenfible, though uncouth poem, which feems to have been written during the reign of Henry VI. with an intention to rouse the miniftry from their indolence during that weak prince’s reign, and which, among other particulars, mentions the wool of Spain, and confirms the juftnefs of the foregoing remarks. Having advifed the Englifh to keep their wool from Flanders, which would thus constrain them to keep peace with Britain, he thus proceeds.

————— For the woolle of England
 Sufteineth the common Fleemings I underftand;
 Then if England would her woolle reftreaine
 From Flanders, this followeth in certaine,
 Flanders of nede [need] muft with us have peace,
 Or els [elfe] fhee is destroyed without lees [release].
 Alfo if Flanders thus destroyed bee,
 Some merchandy of Spain will never ythee, [find vent];
 For destroyed it is, and as in cheefe,
 The wolle of Spain it cometh not to *preefe*, [does not ftand the test, proof];
 But if it be cofted and manged [mixed] well
 Amongft the Englifh wolle the greater delle, [deal, — the greater part
 Englifh],

For

How different, alas ! is the case at present, when Spanish wool
sells in Britain from three to five shillings per pound, while the
best

For Spanish wooll in Flaunders draped is,
And ever hath bee, [been], that men have minde of this ;
And yet wooll is one of the chiefe merchandy [merchandise]
That longeth [belongeth] to Spaine : who so will espie,
It is of little value, trust unto mee,
With English wooll but if it mended [mixed] bee. *vol. 1. p. 188.*

And again, speaking of the Scottish trade in wool to the Netherlands, chiefly
manufactured at *Belle and Popperinge*, he says,

And yet they of *Bell* and *Popperinge*
Could never drape their wooll for any thing ;
But if they had English wooll withal,
Our goodly wooll, which is so generall
Needful to them of Spaine, and Scotland als, [also],
And other costes, [coasts], this sentence is not fals. [false]. *ib. p. 191.*

Mr Hakluyt himself begins his directions to Mr Morgan Hubblethronc dyer,
when sent at the public expence into Persia in the year 1579, for improvement in
the art of dying, in the following words :

“ For that England hath the best *wooll* and *cloth* in the world,” &c.

And in another set of instructions for a principal English factor at Constan-
tinople are the following remarkable particulars.

“ *First*, You cannot denie but that this realme yeeldeth the most fine wooll, the
“ most soft, the most strong wooll, the most durable cloth, and most apte of na-
“ ture of all other to receive die ; and that no island, or any other kingdome so
“ small, doeth yeeld so great abundance of the same,” &c.

“ *Second*, There is no commoditie of this realme that may fet so many poor
“ subjects on worke, as this doeth, that doeth bring in so much treasure, and so
“ much enricheth the merchant, and so much employ the navie of this realme, as
“ this commoditie of our wooll doeth.”

“ Ample and full vent of this noble and rich commoditie is it that the common
“ weale of this realme doeth require.

“ Spaine

best carding-wool of Coteswold or Leominster may be bought for less

“ Spaine nowe aboundeth with woolls, and the same are clothed, [draped or
“ worked into cloth]. Turkie hath woolls, and so have divers provinces of Chri-
“ stendome and Heathenesse, and cloth is made of the same in divers places.

“ 1. But if England have the most fine and the most excellent woolls of the
“ world in all respects (as it cannot be denied but it hath); 2. If there may be
“ added to the same excellent artificiall, and true making, and excellent dying:
“ 3. Then no doubt but that we shall have vent for our clothes, although the rest
“ of the world did abound much more with wooll than it doeth, and although
“ their workmanship and their dying were in every degree equal with ours in Eng-
“ land, unlesse the labour of our people employed that way, and the materials u-
“ sed in dying, should be the cause of the contrary by dearth.

“ But if forren nations turne their woolls, inferior to ours, into truer and more
“ excellent made cloth, and shall die the same in truer, surer, and more excellent
“ and more durable colours, then shall they sell and make ample vent of their
“ clothes, when the English cloth of better wooll shall rest unfold, to the spoyle
“ of the merchant, of the clothier, and of the breeder of the wooll, and to the
“ turning to bag and wallet of the infinite number of the poor people employed
“ in clothing in several degrees of labour here in England.——

“ The woolls being naturall, and excellent colours for dying becoming by this
“ means here also naturall, in all the art of clothing, we want but only one espe-
“ cial thing, viz. Oil.”

Hack. vol. 2. p. 161.—163.

Mr Arthur Edwards, agent for the Russian company, anno 1568, gives the fol-
lowing account of the trade to Venice in wool and woollen stuffs from England.

“ The Venetian merchants in London, sent to Venice, and from thence to
“ Turkie by Aleppo and Tripoli in Syria, and thence into Persia, great abun-
“ dance of fine kurfies, of broad cloths of all sorts and colours, as scarlets, vio-
“ lets, and other of the finest cloths of all the world. Also that the Venetians
“ brought out of England not only such cloths ready made, but furthermore
“ great plenty of *fine wooll* to mingle with their woolls, of which they could not
“ otherwise make fine cloths; affirming, that there went out of England that
“ waies, above two hundred thousand kurfies, and as many broad cloths, besides
“ *fine wooll* and other merchandize; beside also great abundance of the like cloths,
“ the

less than one shilling.*; — and when our best manufacturers acknowledge, that there is not an ounce of English wool that can be employed in making our best superfine cloths, — and only a small proportion in our seconds? — At what time the wool of Spain came to obtain such a decided superiority over that of England, I have

“ the which were carried into Spaine, Barbarie, and divers other countries.
“ *Hack. vol. 1. p. 392.*

* In the year 1719, we learn from the *Sieur Pierre Ricardo*, in his *Traité le ne- goce D'Amsterdam*, p. 86. that the several wools of Europe and of Persia sold there at the following prices, viz.

WOOLS of GERMANY.

	Per	Florins.	Engl. Mon. *
			d.
1. De Rostock & de Grippefwald, de Stralsund & d'Anclam	100 lb.	{ 44 a 45 }	= 10
2. De Sterin, de Thorn, de Dantzick, & de Prufs,	100 lb.	{ 46 a 51 }	= 11
3. De Colberg, de Lunneburg, & de Breme	100 lb.	30 a 33	= 7

WOOLS of POLAND.

	Dutch sols per lb.	English Money.
		s. d. s. d.
4. Laine d'Ete de Pologne	9 a 11	= 9½ to 10½

WOOLS of PERSIA.

5. Laine de Carmenie	{ Rouge,	44 a 46	=	4 1	to 4 3
	{ Blanc,	32 a 39	=	3 0	to 3 6

* The last column is nearly the price per pound at a medium, in English shillings and pence.

SPANISH.

have not been able to ascertain with precision. But by attending to our laws relating to the woollen manufacture we shall be able to

SPANISH WOOLS.

		Dutch sols per lb.		English Money.			
		s.	d.	s.	d.	s.	d.
6. De Segovic,	{ Superfine, - -	40	a 41 = 3	9	to 3	10	$\frac{1}{2}$
	{ Fine, - -	36	a 37 = 3	4	to 3	5	$\frac{1}{4}$
	{ Ordinaire, - -	30	a 31 = 2	9	to 2	10	$\frac{1}{2}$
7. De Burgos,	{ Fine, - -	31	a 32 = 2	10	$\frac{1}{4}$	to 2	11
	{ Ditto ordinaire,	30	a 31 = 2	9	$\frac{3}{4}$	to 2	10
8. De Soria,	{ Segoviane, }	32	a 33 = 2	11	$\frac{1}{2}$	to 3	1
	{ De los rios, }						
	{ De Lombreros,	28	a 29 = 2	7	to 2	8	$\frac{1}{4}$
9. Albarazins,	{ Grande, -	25	a 26 = 2	4	to 2	5	$\frac{1}{2}$
	{ Ditto fine, -	27	a 28 = 2	6	$\frac{1}{4}$	to 2	7
	{ Ditto petite, -	21	a 22 = 1	11	to 2	0	$\frac{3}{4}$
10. Cafferres,	- - -	27	a 28 = 2	6	$\frac{1}{4}$	to 2	7
11. Seguença,	{ Segoviane, -	30	a 31 = 2	9	$\frac{3}{4}$	to 2	10
	{ Seguença, -	21	a 30 = 1	11	$\frac{3}{4}$	to 2	9
12. Quença,	- - -	23	a 24 = 2	2	to 2	3	$\frac{1}{4}$
13. Cabeffe de Bues,	- - -	24	a 25 = 2	3	$\frac{1}{4}$	to 2	4
14. Serena,	- - -	22	a 23 = 2	0	$\frac{3}{4}$	to 2	2
15. Malaga ordinaire,	- - -	19	a 20 = 1	9	$\frac{1}{4}$	to 1	10
16. De Puertos,	- - -	29	a 30 = 2	8	$\frac{1}{4}$	to 2	9
17. Cavalleros,	- - -	30	a 31 = 2	9	$\frac{3}{4}$	to 2	10
18. Molina,	- - -	26	a 27 = 2	5	$\frac{1}{2}$	to 2	6
19. De Castile,	- - -	25	a 26 = 2	4	to 2	5	$\frac{1}{2}$
20. De Campo,	- - -	18	a 19 = 1	10	$\frac{3}{4}$	to 1	11
21. De Estramadure,	- - -	23	a 24 = 2	2	to 2	3	
22. De Seville,	- - -	20	a 21 = 1	10	$\frac{3}{4}$	to 1	11
23. D' Andalufie,	- - -	20	a 22 = 1	10	$\frac{3}{4}$	to 2	0
24. De Navarre,	- - -	13	a 14 = 1	2	$\frac{3}{4}$	to 1	3
25. D'Estramadure,	- - -	20	a 23 = 1	10	$\frac{3}{4}$	to 2	2
26. De Truxito,	- - -	24	a 25 = 2	3	to 2	4	$\frac{1}{4}$
27. Laines de Portugal,	- - -	22	a 28 = 2	0	$\frac{3}{4}$	to 2	7

to give a pretty probable guefs at the feveral changes it may be fupposed to have undergone,—and the means by which it has gradually fallen to its prefent ftate.

It

That the reader may compare this with the prices in England, I here fubjoin a lift of the prices there, taken out of Smith's Memoirs of Wool, ch. 171.

Lincolnfbire wool fold 1719.

	<i>Per tod.</i>
1. Sold to Mr Stocks, at - - -	L. 1 2 0
Sold to ditto, at - - -	0 16 0
2. William Emmet, - - -	1 0 0
3. John Westmoreland, - - -	0 19 6
4. William Harrifon at Fiskerton, - - -	1 0 3
5. Mr Simon of Bullington, - - -	1 1 0
6. John Holfworth of Fiskerton, - - -	1 1 0
Medium price, ———	L. 0 19 11
Sold by Mr Clepfom of Walsbey, at - - -	1 0 0
Medium prices of wool bought by Mr Davies woolftapler in Gran-	
tham, 1719, - - -	1 0 0
Mr Perceval Teale of Smuggham, - - -	1 0 6
Medium price of the whole, ———	L. 1 0 1 $\frac{1}{4}$
or 8 pence halfpenny <i>per</i> pound.	

In the year 1739, the medium prices were as under :

	s.	d.
Lincolnfbire wool, - - -	13	0
Cotfewold wool, - - -	11	6
Ile of Wight, - - -	11	0
	3)	35 6
Medium price, - - -	11	10

or five pence per pound. So that the beft wool in England fold in the year 1739 for lefs than one ninth part of the price that the beft Spanifh wool fold for at Amfterdam in the year 1719,—the superfine Segovia wool having been then

It is difficult to say at what time Britain first began to export wool as an article of commerce, or to manufacture it in stuffs for her own use or that of others : but it has been already shewn, that both of these were practised in this country at a very early period. But in the time of Edward III. the trade in wool was so considerable, that there was exported in one year to the amount of L. 294,088 : 14 : 8, which was equal in weight to L. 729,340, 11 s. 3½ d. of the present coin of Great Britain, the pound Sterling having been then nearly a real pound weight of silver *. An amazing sum this, considering the high value of the precious metals in those days.

Under the auspices of that sagacious prince, the wool-manufacture in this island began to be established on a more stable foot-

fold at 3 s. 10¼ d. per pound. What a dreadful difference between the case now and what it was in the thirteenth century, when the best English wool exceeded the Spanish by one third at least, perhaps two thirds of its price !

I shall here subjoin the prices of the wool in several places in France, from the *Traité de bêtes à laine*.

			French sols per pound.	English pence nearly.
Fine wool of Rouffillon,	-	-	40	= 20
In the province of Maine,	-	-	40	= 20
Of Champagne in Berry,	-	-	40	= 20
Wool of Sologne,	-	-	40	= 20
Of Haute Beaufle, long combing-wool,	-	-	16	= 8
Of Normandy finest,	-	-	30	= 15
Medium of the fine wools in France,	-	-	34	= 17

So that the medium price of the finest wools in France is about three times more than the finest wools in Britain.

* Vide Appendix, N°. I.

ing than formerly : by means of which, and the export of wool, the industrious people were employed ; — the landed interest shared in the profits ; and the crown enjoyed a considerable revenue : — so that all ranks of people experienced the benefits of his wise regulations in this respect. And although the nation was alternately weakened by the foolish desire of conquests with which its kings were seized, and by bloody civil wars, — yet at every interval of repose, it waxed stronger, and advanced a little towards that eminence in commerce and in arts which it hath since so happily attained.

It was not to be expected, that the just principles of commerce should be at once thoroughly understood by a rude people making their first essays in that art. But experience gradually taught them knowledge ; and the sagacious penetration of Henry VII. enabled him to discover and correct many abuses that had been adopted by his predecessors, and shun some errors into which his successors have fallen. — So that during his reign the manufacturing part of the nation experienced a greater degree of internal felicity than at any former period.

But it was not till the happy æra of Elifabeth, that the principles of commerce began to be properly studied and understood in Britain ; and the dictates of right reason so happily adopted, and steadily pursued, as raised it to a still higher pitch of internal felicity ; and laid the foundation for that prosperity and glory that we now enjoy. But the wisest counsels last but for a time ; and the best-laid plans for promoting the felicity of mankind are often frustrated by the folly, the avidity, or the pride of mortals.

Elifabeth saw with regret, that a spirit of monopoly had too much prevailed in the kingdom before her day. Powerful companies, by ministring to the wants of needy princes, had obtained privileges, that, although disguised under the specious appearance of public benefits to the nation, had cramped individuals in many respects, and hindered them from reaping those benefits that their sober industry gave them a just title to expect.—She knew, that it was not the riches of a few overgrown monopolists that could ever constitute the real strength of her dominions; but the prosperity and happiness of the lowest individuals who were under her dominion.—She therefore boldly resolved to crush those powerful companies that had attained almost a sovereign power in some respects, and, with an impetuous steadiness, peculiarly her own, ceased not till she had freed the nation from their thralldom, and planted the tree of Liberty at the door of the meanest cottage in England, under the benign influence of which every man might exert his talents in that way by which he could most benefit himself, without fear of being annoyed by the power or influence of any one.

Before her time the struggles between the landed and manufacturing interests had been continued for many ages; each trying which should undermine or over-reach the other; — foolishly imagining that their interests were different, and might be separated from one another. And, as princes were sometimes weak enough to adopt the same idea, partial laws were sometimes made, by which the apparent interests of the one were obliged to give way to those of the other.

The great point contended for by the manufacturers was, to obtain a monopoly of the wool that grew in the island, by excluding

ding strangers from coming to purchase it here;—hoping, that if this could ever be effected, the price of that commodity would be so much lowered, as would give them such a superiority over all other manufacturers that were not under the same circumstances with themselves, as to secure to them in a great measure a monopoly of the woollen manufacture itself through all the world. But vain are the hopes that man may form of lasting success in life, unless when his views are founded upon the solid basis of equity, which alone can withstand the shocks that every human undertaking must for ever be exposed to.

Princes, however, were sometimes prevailed upon to humour their subjects in their unreasonable demands : but the profits that accrued to them by the exportation of wool were too considerable to be sacrificed almost on any account. Laws were made to prohibit the exportation of wool, with an *apparent* view to serve these monopolists,—but with a *real* intention to bring more money to the prince,—who by selling licences for that purpose, filled his own coffers in a more expeditious way than he could have done if these prohibitory laws had not been made *.

And

* By the 11th Edward III. it was enacted, That “it shall be felony to carry any wool beyond the realm *until it shall be otherwise ordained.*” These are the words of the statute, by which it appears, that it was only a prohibition on the part of the people, which the crown considered itself at liberty to dispense with in virtue of a writ *de non obstante*; which was a power they had copied from the court of Rome, by which it was allowed, *That the crown had power to dispense with a penal law, when prohibiting only that which is not malum in se*: A privilege that was claimed, and exercised, by the crown, as one of its undoubted prerogatives, from before this time till the revolution. In the present case it was fully exercised: for although this law was passed in the month of March 1337, on the 3d of February following another

And although the same attempts were continued under the reign of Elifabeth with some hope of success, from having observed

another parliament was held, in which the laity granted the King one half of their wool for the next summer; at the same time he took *the whole* from the clergy, forcing them to redeem it at nine marks per sack.

And in Rymer, tome 5. we meet with the following passes in the year 1338.

1. *Pro mercatoribus Brabantiae*, A pass for 2200 sacks, p. 32.
2. *De conductu pro lana Cardinalium*. A safe conduct for a certain quantity of wool to be exported to Brabant, *pro liberatione Summi Pontificis & Cardinalium inde facienda*, p. 44.
3. *Pro mercatoribus Brabantiae*, A direction to the admiral to afford the merchants of Brabant a convoy for their wools, p. 51.
4. *De lana capienda, et cum celeritate ad Anwerpiam transvehenda*, p. 73.
5. *De intentend. super lanes transportandes*, p. 80.

I might in the same manner show, that every seeming prohibition that occurs against the exportation of wool from these days till the restoration, was followed by such licences. — Nor indeed was there any thing that had the appearance of seriously intending to prohibit the exportation of wool till the year 1622, that James I. having quarrelled with his parliament, and willing to coax his feeble supporters the monopolists, by proclamation forbid the exportation of wool; — although it appears from the very words of another proclamation for the same effect, issued by his son Charles I. anno 1630, that licences had been granted by him; for he expressly repeals any *former licences* that may be still in force, — probably with a view to reap the benefit that would accrue from the renewal of them. For in the year 1632 he publishes another proclamation against exporting wool, complaining, that his officers have permitted the same to pass, either *without licence*, or *in greater quantities than the licences allowed of*. So that we see licences were still permitted, notwithstanding his proclamation to the contrary.

A D. 1639, Another proclamation against exporting wool, &c. any *licence or toleration* formerly granted notwithstanding — Rapin tells us, (vol. 2. p. 308.), that “about this time the King did publish a proclamation, to revoke sundry monopolies, licences, and commissions, that he had granted by letters patents. But very likely this was to amuse the people; and the proclamation was not executed, since the next year he published another, to revoke the same monopolies that had been abolished by this.”

Something

served with what attention she continued to cherish the manufactures of her kingdom, yet her counsellors were too wise to be imposed upon by their impolitic attempts *. And although she voluntarily prohibited the exportation of rams, yet she could never be prevailed with to give any check to the exportation of wool from her dominions.

But the wise counsels of that sagacious princess were not adhered to by her immediate successors, who, always needy,

Something of the same kind seems to have been intended by an ordinance of parliament in the year 1647, prohibiting the exportation of wools under severe penalties; seeing a sensible writer, in a book published in the year 1656, called the *Golden Fleece*, speaking of this subject, says, "In this part of our complaint we presume not to meddle with *licences* granted by the state to export raw wool, or white cloths, both of which have been permitted to pass the seas, as well for the good of the people, as for the benefit of clothing itself," &c. p. 96.— Again, p. 97. "As for raw wools, there may be advantage to the commonwealth by their exportation;"— and he afterwards adds, "The place also to which wool may be licensed to pass, ought to be considered," &c.

Thus it appears, that so late as the year 1656, it was customary to grant licences to export wool; nor was this considered as a grievance:— so that it does not appear that ever the legislature seriously intended to prohibit it till after the Restoration. And indeed it is truly ridiculous, to hear writers seriously asserting, (as they have often done), that the exportation of wool was totally prohibited by Edward III. and never was permitted afterwards; as the slightest attention must have convinced them, that exported wool was at all times the principal branch of the revenue of that prince;— and that the duty on wool always formed a part of the tonnage and poundage act, granted by parliament to every succeeding prince at the beginning of his reign, till the days of Charles I.

* A political writer in the year 1679 says, "It was an observation of Lord Burleigh, that if wool fell one shilling in the stone, it's a million a-year loss to the nation." Such were the sentiments of that able statesman. How different from the politics of after times!

and

and grasping at an authority they could not obtain, were too ready to favour every plan that might be suggested by favourites, or bring money into their coffers.—James and Charles successively prohibited the exportation of wool by proclamation, and dispensed with it when they saw fit;—but it was not till the Restoration, that a law was made in good earnest, prohibiting under severe penalties the exportation of wool to any part of the world. Thus had Charles II. the merit of introducing this monopoly, along with many others, that have so justly disgraced his reign.

But by what fatality this idea came to be adopted by succeeding kings, and the legislature at large, seems to be a little unaccountable.—True it is, however, that this idea has been strenuously adopted by the bulk of the nation ever since; although experience, as well as reasoning, ought long ago to have satisfied every considerate person, that its consequences, if continued, must not only prove pernicious, but absolutely ruinous, to the woollen manufactures of the nation; as I hope you will be convinced of from what follows.

The first effect that was felt from this law, was the sinking the price of wool in England, which was reduced to less than one half of what it used formerly to be *. This was what had been expected;

* Vide Smith's Mem. of wool, chap. 176. *et passim*.

This is further confirmed by Roger Coke, in his treatise, intitled, *The equal danger of church, state, and trade, of England*, p. 18. who says, "And yet it is felony to export wool: by reason whereof it becomes a drug, and of no esteem at home; so that, if the poor country-man cannot sell it at home, himself and family must be undone; or if he seeks subsistence by endeavouring to find a market abroad, he incurs a penalty." Printed 1671.

expected ; but the woollen manufacture did not encrease in proportion. For during all the reign of Charles II. and James II. the woollen exports never amounted, at a medium, to above one half of what they had been in the days of Elifabeth : for, in the year 1560, Guiccardin remarks, that the exports of wool and woollen stuffs from England to Antwerp alone, amounted to 4,250,000 scudi or crowns, or L. 1,062,500 Sterling ; in which he is corroborated by Camden.— Besides which, England carried on at that time a very considerable trade to *Amsterdam, Hamburgh, Scotland, Ireland, Sweden, Muscovy, Italy, Barbary*, and a considerable contraband trade to *France, Spain, and Portugal* ; so that, at a moderate computation, the woollen exports could not be reckoned at that time lower than L. 2,000,000 annually ; whereas the woollen exports, from the middle to the end of the next century, did not, at a medium, exceed L. 1,000,000 annually *. But there were other consequences that resulted from thence that were not so clearly apprehended.

From the low price of wool, and the difficulty of vending it, farmers were naturally induced to diminish the number of their sheep, and turn themselves to some other more profitable employ-

Another writer to the same purport observes, “ It is to be feared, that of late not one third part of the wool which is growing in this nation, is consumed in our woollen manufacture, but is sent over to our neighbours ; and they buying most of the wool growing in Ireland, they have almost gotten the manufacture from us, and we undone ; *the prices of wool being so low*, that if people did not send it beyond seas, they would not in many places be able to pay half their rents, wool falling in value as much as land.” *Letter on the French usurpations on the trade of England.* By J. R. 1679, p. 11.

* Vide King's British merchant.

ment *; so that in a short time the benefit that resulted from thence to the manufacturer was far less considerable than was at first apprehended.

Again, while wool was allowed to be exported freely upon paying a certain duty, the finest was most coveted by foreign merchants, because the duty bore a smaller proportion to its price, than it did to the price of that which was coarser; on which account, fine wool, having the benefit of a foreign market, as well as of that at home, sold at a very high price;—whereas coarser wool, having no other

* That the number of sheep in England is greatly decreased since the days of Elizabeth, is sufficiently obvious from the following considerations.

1. From the probability that this would be the case, in consequence of the great fall in the price of wool after the exportation of it was prohibited;—as it is certain, that mankind will in general be governed in cases of this sort by their own interest.

2. Before that period there is frequent mention made of numerous tumults in various parts of the kingdom, by the poor people, the cause of which they invariably declare to be to prevent inclosures, and the *great encrease of sheep*, which they always complained of as the cause of every distress they felt;—which at least shows that sheep then abounded very much.

3. We find parliament frequently regulating the price of provisions;—but never any mention is then made of any sort of grain.—Thus, *anno* 1315, the parliament fix these prices; a fat ox 16s.—a cow 12s.—a hog 3s. 4d.—a wether unshorn 20d.—ditto shorn 14d.—a goose 2½d.—a capon 2d.—a hen 1d.—But no limitation of the price of grain.—Again, 1532, there was a law limiting the price of beef and pork at 1d. mutton and veal at ¾d. per pound, in London.—Many other laws to the same effect may be found in Stowe, Stillingfleet, &c.; all of which show, that the legislature considered *meat* to be the principal article of food for all kinds of people, and bread as only secondary to that.

4. That this was actually the case, may be certain from the prodigious variations that took place in the prices of grain.—For had mankind had as much reliance upon it then as now, it would have been impossible for them to have been subsist-

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ther market but at home, was obliged to be sold at exceeding low prices. In consequence of which peculiarity, farmers finding so much greater profit from rearing fine than coarse wool, made it a material part of their business to improve their wools in this respect to the utmost of their power. But when foreign merchants were excluded from coming to market, the quantity of fine wool becoming at once so much greater than the demand for it, would fall in its value to such a degree, as to be little different from the low-priced wools.—It was not after that period, as it had always been before, an object of attention to preserve or im-

ed at all on many occasions, the wheat fluctuating often suddenly from 1 s. to L. 4, or 5, or 6, per quarter, or *vice versa*.

5. This seems to be still farther confirmed by the inconsiderable variation in the prices of live stock.—Thus we see, that, in the year 1318, an ox was 16 s. a hog 3 s. 4 d. and a wether 20 d.

Anno 1444, the price of an ox L. 1 : 11 : 8,—a hog 3 s.

1530, an ox L. 1 : 5 : 9,—a sheep 3 s.

1531, an ox L. 1 : 6 : 8,—a sheep 2 s. 10 d.—a hog 3 s. 8 d.

1563, an ox L. 2,—a sheep 6 s.—a fwine 6 s.

From which it appears, that the prices of these articles have varied almost as little as grain does with us now.

6. In the days of Elisabeth, and before that period, we find in all regulations of household affairs, almost the whole of the provisions mentioned is meat of one sort or other, and very little bread.—The breakfast of Queen Elisabeth and hermaids of honour was beef, mutton, &c. in large quantities, but little bread.

From all these circumstances, I think we may with safety conclude, that till about the time of the Restoration meat of one sort or other constituted the principal part of the food of all ranks of people in England; and since that time bread has come to be more and more used, till it may now, with great propriety, be called *the staff of life*. Hence it will follow, that live stock of all kinds, but especially sheep, (mutton having been in those times always cheaper than beef), abounded more then than at present; — and that grain abounds much more now than in former times.

prove the quality of the wool.—The farmer's attention came then to be chiefly directed to the improvement of the carcase of his sheep, as from it he derived his most considerable profit.

These consequences may be so naturally expected to follow from this arrangement, that I would not give myself the trouble of searching for examples, to prove that there was a much greater difference between the highest and lowest priced wools in Britain, before the exportation of wool was prohibited, than after that period, had not one come in my way, that is so much in point, that I hope you will excuse me for quoting it.

In the year 1343, the parliament settled the prices of wool, viz. that of Shropshire, at 14 marks, or L. 9 : 6 : 8; of Oxford and Staffordshire, at 13 marks; of Leicester, Gloucester, and Hereford, at 12 marks; and other counties, at 11, 10, 9, 8, 7, &c. till it came to the lowest-priced wool of Cornwall, which was valued at no more than 4 marks per sack*; so that at that time the best wool in England sold at near four times the price that could be drawn for the worst.

The experience of every man in the least versant in these matters, will easily satisfy him that this is not the case at present, as I believe the best wool in England does not sell at double the price of the worst, as it comes from the farmer. By a very curious account, preserved in Smith's *Memoirs of Wool*, ch. 171. we learn, that the medium price of Cotswold wool, from 1737 to 1745, was 13 s. 6 d. per tod; and that of the isle of Wight for the same time, was, at a medium, 14 s.; and as a tod of wool contains

* Anderson's *Hist. of Commerce*, ann. 1343.

exactly twenty-eight pounds, the latter was precisely sixpence per pound, and the former a fraction less. These are reckoned among the finest wools in England; so that at the same proportion coarse wool should have been bought at little more than three halfpence per pound; a price that I believe was never heard of for sound wool of any sort.

But although the difference in the price to our own manufacturers was, in the year 1343, nearly as four to one; yet to foreign merchants the difference was not near so great: for as the duty was always a part of the price to them, it must likewise be taken into the account, when we consider *them* as the buyers; and as this duty was for the most part L. 3 : 6 : 8 *, that, if added to the prices fixed by parliament, would make the price of the finest wool amount to L. 12 : 13 : 4, or nineteen marks, and that of the lowest-priced kind to nine marks: so that the coarsest wool in England would have cost the foreign merchant little less than half the price of the finest, (not to mention freight, &c. which would be as high for the coarse as for the fine), the bare duty alone amounting to more than the price of the first, which was an effectual bar to the exportation of it; and to more than one third of the price of the finest: which ought surely to have given our manufacturers such a considerable advantage over their rivals as ought to have satisfied their most ambitious wishes.

The greatest advantage, however, that the home manufacturers derived from hence, was evidently in favour of those coarse cloths which are manufactured for home consumption, and afford cloathing

* It was sometimes at L. 4, and was once at least L. 5 per sack.

to the lower classes of people, who always constitute the principal strength of a state, and whose comfortable subsistence will always claim the principal attention of every considerate legislature. But no sooner were foreigners excluded from our markets, and the number of our sheep diminished, than the price of this coarse wool, which must always be manufactured in greater quantities than fine wool, rose with the demand for it, till it came to be much nearer the same value with the other; and our poor people were of course obliged to pay a higher price for their cloathing, or at best were not at all benefited by this law.— But other evils ensued from this absurd law that deserve to be particularly pointed out.

In a short time, in consequence of the inattention of the farmer to rear fine wool, for which he could receive no adequate price, it was discovered, that the cloth made of our finest wool could not bear a competition in foreign markets with that manufactured in Holland, France, and the Netherlands, from Spanish wool; so that we soon found ourselves obliged, either to give up our manufacture of *fine cloths* entirely, or resort to Spain likewise for the materials of which they are composed. We have chosen to adopt the last line of conduct: and we still carry on a considerable manufacture of fine cloths; but under all the disadvantages that every manufacture must experience, that depends upon a foreign country for its raw materials, it being confessed on all hands, that not one yard of superfine cloth could be manufactured at present with English wool.

In the days of Elisabeth this was not the case. With that spirit of intrepidity that results from conscious independence, she bid defiance to the haughty power of Spain. Her industrious subjects

jects possessing treasures at home, which nothing but their own folly could have deprived them of, with unceasing assiduity studied to avail themselves of these to the utmost, and sent her woollen manufactures to the furthest corners of the known world; and these manufactures were universally prized as the best in Europe, and sought for as such.

Her sagacious counsellors easily foresaw, that the improvement of their own wool was the only effectual means of securing to Britain a superiority in the woollen manufacture over all other nations, and therefore they exerted themselves to the utmost to promote that end.—They were sensible, that so long as England could procure the materials for fine cloth within herself, at thirty or forty *per cent.* below what other nations could obtain it for, her own manufacturers would be always able to secure a superiority over others in every foreign market; and this they knew must ever be the case, so long as other nations resorted to Britain to purchase her wool, loaded with a duty that amounted to that sum: so that, instead of preventing the exportation of her wool, Elizabeth wished to encourage it to the utmost of her power, in a consistency with these views. Accordingly we find it remarked by historians, with a kind of exultation, that, in the year 1551, no less than sixty ships sailed at once from Southampton laden with wool to the Netherlands *; and the judicious Camden observes, that in the year 1569, “the two merchant companies of the *Staple* and “*Merchant Adventurers* were considerably encreasing in trade, the “former in the exportation of our wool, and the latter of our cloth, “both to the advancement of the Queen’s revenue, and the general prosperity of the nation.” So that the *Lanamania* that af-

* Hist. of Commerce, p. 382.

terwards

terwards took possession of the cabinet-council, had not yet begun to appear at court.

In the present situation of things it is plain, that Britain possesses no advantage whatever over the neighbouring nations as to the manufacture of superfine cloths made of Spanish wool.—And in consequence of this, have not the French already beat us almost entirely out of our Levant trade; which used to be a most considerable branch of our commerce *? and have not the Swedes, Russians, and Prussians, banished our cloths from their dominions, to make room for their own manufactures; which, like ours, are furnished from Spain with materials for their fine cloths, and with their own wools for those of the ordinary sort? In short, to what part of the world does England now export her woollen manufactures in any considerable quantities, unless it be to Scotland, her own colonies in America, and to Spain and Portugal?

And what reason has she to rely upon the continuance of these two last markets? Is it not evident, that ever since the accession of the family of Bourbon to the throne of Spain, the French have been particularly favoured at that court; in consequence of which they have had many advantages in trade that other nations do not

* M. Carlier speaks in the following terms of the progress of the French Levant trade. “ Avant le commencement de ce siècle la nation Française ne faisoit pas un quart du commerce du Levant en marchandises de draperie. Depuis 1700 jusqu’en 1730, nos ventes ont augmenté considérablement. Nos progrès depuis cette dernière époque ont été si rapides, que nous faisons aujourd’hui plus des deux tiers de ce commerce. Le restant est exploité par les Italiens, les Hollandois, & les Anglois, du côté desquels la balance penchoit encore il y a quarante ans.” *Traité des bêtes à laine*, p. 623.

enjoy? But even without any partial favour, is it not in their power, or in the power of the Dutch, to purchase wool at as reasonable prices in Spain as we can do, and to transport it to some of their manufacturing places at an easier expence? And is it not also very well known, that it can there be manufactured as cheap or cheaper than in Britain even in time of peace? — But in time of war, when we can only obtain this by the intervention of others, the advantage must be much more on their side: so that there is the greatest reason to apprehend that our trade, especially for superfine cloths, to that quarter, will greatly diminish, even without any efforts of Spain herself.

And who can tell that Spain will always continue in that inactive lethargy which has oppressed her for more than a century past? If she should ever be so wise as to revive her own long-lost woollen manufacture *, — or to load her wool with a duty on exportation, as it is said she proposes to do †; and if she should think fit to favour any other nation more than ourselves, — may we not ask, what in either of these cases would become of the fine woollen manufactures of England?

* In the year 1519, there was a riot of the manufacturers of wool in Spain; which was appeased by giving them liberty to seize one half of the Spanish wool that was to have been exported, and to keep it to themselves at the same price that foreigners were to have paid for it. *Hist. of Com. p. 349.*

When shall Spain be able to boast of an insurrection from a similar cause! When shall she see an insurrection of the lower ranks of her people for *any cause*! A broken and a servile spirit is not an offering that ought ever to be acceptable to any earthly monarch from his subjects. It is to the decrees of *Heaven* alone that the human mind ought to yield a purely passive obedience.

† By a letter from Madrid, of the October 1765, in the public newspapers, it is said, that this plan has been agitated in council.

As to Portugal, it cannot be doubted, but she could easily manufacture her own woollen stuffs, as she neither wants materials nor other conveniencies within herself for this purpose*. And
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* What the Portuguese *could* do in this way, if they had a mind to it, may be easily learned from what they already *have done* on a former occasion; as we learn from a very well informed author.

“ In the year 1681, one *Courteen*, an Irishman, a servant in the family of the then Queen of England, afterwards Queen-dowager, carried over several clothiers and bay-makers into Portugal, where they presently set up the manufactures, both of cloths and bays, particularly at Port *Alegre*, and *Covillhan*.

“ It was soon found that the staple of their wool was too short for bays, therefore their bay-makers were dismissed.

“ But they proceeded in their manufacture of cloth; and soon brought it to such perfection, that, in 1684, either in June or July, upon the Conde d’*Ereicera*’s project to encrease their exportations, and lessen the consumption of foreign manufactures, as well as to encourage their own, the King of Portugal made a sumptuary law to restrain several excesses in the kingdom; and, among the rest, the importation of all foreign woollen cloths was prohibited.

“ Upon this the foreign merchants in that country made several remonstrances; but could by no means obtain that the prohibition should be set aside: yet they obtained a year’s time to bring in those that were on the way, but were obliged to reship whatever should arrive after the time limited.” *Thus in four years did their woollen manufacture attain to such perfection, as to enable them to dispense with foreign cloths entirely.*

“ But the Portuguese went on successfully: their manufacture of woollen cloths encreased to that degree, that both *Portugal* and *Brazil* were supplied from their own fabrics; and the materials of this manufacture were their own and Spanish wool, and no other, &c.

“ This was their first essay: but can we be so very fond as to think they would have stopped here? or that they would not have proceeded afterwards to other parts of manufacture? They would have gone on from cloths to druggets, from druggets to ferges, and so to other things, till, one after another, at last all foreign woollen goods would have been prohibited.

“ Mr Methuen’s treaty, (1707), by taking off the prohibition of British cloths,
“ and

is it not well known, that the attempts of their present minister to revive these manufactures, have given rise to all those jealousies and complaints of the British merchants in Portugal with which the news-papers have been filled for some time past *? It is indeed doubtful, if in their present situation they will be able to effect that, or if they will dare to take a step that would so much offend the British court, upon whom they must at present have so much reliance for protection. But as it is ungenerous to take advantage of the weakness of an ally, to force him to accept our manufactures to the detriment of his own subjects; so it is not to be doubted, but some noble minds may feel the indignity, and detest the oppressor,—and, by a noble and well-timed exertion, free themselves from that miserable thralldom into which their own inconsiderate indolence has precipitated them.

“and by providing, that neither these, nor any of the *British* woollen manufactures in Portugal, should be hereafter prohibited, was the immediate ruin of all the fabrics in that country, and opened to us a market, by the *Mercator's* own shewing, for above 10,000 of our cloths, above the value of 500,000 l. *per annum.*” *King's British Merchant.*

Thus did Portugal, by the spirited exertion of one able minister, (the Conde *d'Ereicera*), gain in a few years a perfect knowledge in a principal branch of the woollen manufacture; which they might have possessed, to the infinite emolument of the poor subjects of his Faithful Majesty till this hour, had not the nation, by the death of that patriotic nobleman, lost her best counsellor, and been over-reached by the more able British minister Mr Methuen.—But should another like *Ereicera* arise, have they not still the same means to effectuate the like attempt should it be begun?

* These complaints have now (Nov. 1776) subsided entirely: when the above was written they were very recent. Probably this cordiality in Portugal of late with the British merchants, proceeds from a fear of disobliging Britain at present, when she is threatened with a war with Spain. If so, we shall probably have the complaints renewed as soon as their fears on this account shall subside.

Thus it appears, that the woollen manufacture in England is in many respects in a more unstable state than many persons are aware of, which is to be attributed almost entirely to that unwise law that prohibited the exportation of our wool.

It was the consideration of these circumstances that induced me in my last to throw out the hints that alarmed you so much : and as I did not see any probability of obviating these, but by adopting the plan proposed for improving the wool of Scotland ; while I was at the same time fully convinced, that in consequence of such steps as have been recommended, vigorously pursued, as fine or finer wool than that of Spain might be produced here in abundance ; I concluded, that it was possible the woollen manufacture might come to be adopted, and to flourish, in that part of the island, when it begun to decline in the southern provinces ; in the same manner as it has begun to flourish in Yorkshire after it has declined in Middlesex and the adjacent counties.

The above catalogue of dismal effects that have resulted from the law against the exportation of British wool, is more than sufficient to reprobate it entirely, and ought to induce the legislature to repeal it as soon as possible, were it attended with no other inconveniencies than those already enumerated. Its baneful influence, however, does not rest here : For to it likewise are we indebted for that ruinous trade called *Ouling*, or smuggling of wool from England and Ireland, which has long been practised on a very wide scale, to the inestimable detriment of the nation, notwithstanding the repeated expensive endeavours of government to suppress it.

It has been computed, that 800,000 sacks of wool are thus annually

nually carried out of England and Ireland to France, at a price much below what it could ever have been obtained for, had exportation been legally permitted on the ancient footing: so that their manufactures are supported by our own wool, and they are enabled to rival our manufacturers by the aid they thus obtain *.

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* When a nation adopts any iniquitous plan, to advance its own prosperity at the expence of others, it is impossible to foresee half the bad effects that may result from it.—It was vainly imagined by some short-sighted politicians, that in consequence of the low price of wool in England that would result from the law prohibiting the exportation of wool, the English manufacturer would be enabled to undersell all others, and would thus obtain a monopoly of the woollen trade to all the world; and it would be no difficult matter to produce many authors who seriously believed in such a visionary project. How different was the result of that experiment! At that time France had almost no woollen manufacture; and it would have been long before she would have been able to cope with England, had she been obliged to purchase her wools at the former price. But when the prices of wool were so much reduced in England, the French found themselves able to purchase it, by a contraband trade, so much below its old rate, that they were enabled not only to manufacture cloths for themselves, but to export them to others to a great amount. Thus, by endeavouring to grasp too greedily at more than our own, we furnished a weapon to our most dangerous rivals, by the aid of which they were enabled successfully to attack us.

Since the former part of this note was written, I find some persons have a difficulty to comprehend, how it was possible for the French to purchase their wool cheaper after the exportation of our wool was prohibited than before it, as it now must come to them loaded with the whole charge of smuggling, which it is imagined will at least be equal to the former duty on exportation. There are, however, several reasons why they should get it much cheaper than before, and even perhaps cheaper than the British manufacturers themselves.

In the *first* place, As foreign merchants are now excluded from the commerce of wool, it has fallen prodigiously in its price, being at a medium not above half the price it used formerly to be sold at; — so that although France should be at the whole charge of smuggling it, the original purchase is so much below what it formerly was, or ever would have been without that absurd law, that her manufacturers can buy it at home at a much lower price than formerly. But,

Secondly,

How much wiser would it have been to have suffered them to export our wool legally ; in return for which it would have been in the power of the legislature to have accepted of money, or some useful produce we are in need of, instead of those products and manufactures of that country that are by this means poured into Britain, to the unspeakable detriment of our own manufacturers and industrious poor !

It would require a volume to describe *all* the bad effects that result to the nation from this single branch of contraband trade, and would demand a much more masterly pen than mine to paint

Secondly, France does not in reality pay for the charge of smuggling our wool. For by the many prohibitory laws against the commerce of France, our smugglers are ready to run the risk, or at least to meet them half-way, for the profit they are enabled to make by the goods they receive in return. And,

Thirdly, As the price of those French goods prohibited by the laws of Britain are prodigiously enhanced in our market above their natural value, a very small quantity of these will amount to a much greater price to the smuggler at home, than the home market price of his wool ; so that in this way, by a very advantageous barter, the French may, and I believe really do, get our wool, from Ireland especially, cheaper than the British manufacturers themselves.

It is by attending to circumstances of this sort, that we are enabled to explain many seeming paradoxes in trade ; among which the following may be reckoned one.— A very sensible manufacturer lately assured me, that for many years past, English wool of equal fineness may be bought at Amsterdam cheaper than at London ; and that he himself would probably have bought it there, and brought it to Scotland, had it not been that the general course of his trade led him more naturally to the London market.—It is thus that Avarice almost always counteracts her own purposes ; and our endeavours to obtain an unjust ascendancy over others, for the most part turns out in the end to their emolument, and the detriment of ourselves.— Hoping to obtain an ascendancy over all others by the monopoly of our wool, we have thus essentially hurt our own manufactures, and encouraged those of our rivals, to a degree that no efforts of their own, unaided by our folly, could ever have effected.

in proper colours the hurt that the nation sustains by the number of our poor that are thus deprived of bread ; — the greater numbers still, whose labours in this way become pernicious instead of being useful to that state to which they belong, — whose morals are so effectually corrupted as to tend to pervert the principles of every other person with whom they may converse ; — the swarms of useless drones, who, under the name of *excise* and *custom-house officers*, are appointed to look after that race of banditti, whose morals soon become tainted as well as the others, and who suck out the vitals of their country without benefiting it, or indeed having it in their power to benefit it, in the smallest degree. But these are evils of such a serious nature as must induce every good man to wish, that the only effectual plan for preventing them might quickly be adopted by some wise and truly patriotic legislature.

I hope you will excuse me for the freedom with which I have delivered my sentiments on this interesting subject. I should now proceed to take notice of the other objections you have suggested ; but this I reserve to my next. Believe me ever to be, &c.

O B

NATIONAL INSTITUTE

REPORT ON THE PROGRESS OF THE WORK DURING THE YEAR 1900

BY THE NATIONAL INSTITUTE OF STANDARDS

WASHINGTON, D. C. 1901

THE NATIONAL INSTITUTE OF STANDARDS

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N A T I O N A L I N D U S T R Y.

L E T T E R T H I R T E E N T H.

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C O N T E N T S.

Further objections.—Manufactures are cheaper when provisions are dear, than when they are cheap; therefore it is alledged that a cheap country should not be so proper for manufactures as has been pretended.—*Answers.*—The inference not just.—Necessary distinction between money and riches.—The nature of money defined, and its effects on society pointed out.—The ruinous consequence of too much money in a state, exemplified with regard to manufactures.—Farther illustrated by a review of the present state of Spain.—It is not the plenty of money, but the vigorous exertion of industry among all ranks of people, that constitutes the highest felicity of a state.—In what manner the East-India trade has proved uncommonly beneficial to Britain,—and Europe in general.—Pernicious tendency of paper-money.—Inference.—A country where money is of high value, is much more favourable for manufactures than one where it is low;—hence Scotland than England.—The consequence of a temporary rise in the price of provisions investigated;—proved to be extremely prejudicial to manufactures.—The corn-laws in England, as tending to prevent this, highly commended.—The beneficial consequences that have resulted from thence, illustrated,—by reasoning,—and examples.—Striking contrast between the spirit of the corn-laws, and those with regard to wool.—Our example as to the last followed by France.—The hurtful effects that resulted from thence, remarked by their ministry; and their laws in this respect wisely repealed.—The corn-laws with regard to Scotland iniquitous;—are prejudicial to agriculture;—ought to be repealed, and a more equitable system of legislation adopted in their stead.



O B S E R V A T I O N S
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N A T I O N A L I N D U S T R Y.

L E T T E R T H I R T E E N T H.

To Mr ***** London.

DEAR SIR,

November 30. 1775.

I COULD not help smiling when I read the remarks of your friend the *woollen manufacturer* upon what I had incidentally said of the advantages that Scotland might derive from manufactures on account of the cheapness of living in it. This, I imagined, would have been controverted by no body; — but it appears I have been mistaken; as he attacks that position with the greatest

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keenness,

keenness, and seeming conviction of the truth of the opinion he has adopted.

But as I presume his reasoning could have had little effect in convincing you, I would have dismissed it with this single remark, That it might have afforded a striking proof how far natural good sense may be over-ruled by the prejudices of education; and that it is extremely difficult for those who in the early part of life have been obliged to confine their views to one single object, afterwards to divest themselves of the partial ideas they may have then imbibed, and to distinguish clearly between particular circumstances that might affect only themselves, and those general laws that operate upon the whole community. But since he has taken the trouble to write out his reasons at full length with his own hand, for my inspection, I find myself bound in good manners to return an answer to them, in the same serious strain that he has proposed them. I really have a very good opinion of his talents and dispositions, although he seems to have been particularly unlucky in adopting this capricious idea. I shall therefore be at some pains to convince his understanding without irritating his passions. Be pleased therefore to communicate to him the following answers, which I have written on a separate piece of paper for his perusal.

All the arguments employed by your friend may be reduced to this.— “ When at any time, from an accidental scarcity, provisions are dear, it is found by experience, that manufactures can be afforded cheaper than usual; and when, on the contrary, there is greater plenty than common, and markets are unusually cheap, the price of manufactures and the wages of workmen rise in proportion.— Hence it is inferred, that manufactures

“factures would always be afforded cheaper, if provisions were
“at all times dear, than if they were constantly cheap*.”

But although it be granted, that necessity alone induces men to work; and that when people can earn as much in one day as may maintain them for two, or more, they will then be more disposed to indulge their own inclinations, and work less than when the whole labour of the day is barely sufficient to supply the wants of nature; so that more labourers will be in the market in the last case than in the first; and thus it will be in the power of the employer of these to moderate their wages, if he shall so encline: — yet by no means doth it follow, that the inference drawn from thence is just; as will appear from the following considerations.

Money and *riches* have been often confounded as synonymous terms; which has occasioned much confusion in our ideas and mode of reasoning on subjects of this nature. — A man may be called *rich* in any part of the world, who possesses an abundance of those things that minister directly to the necessities and conveniences of life: — but there are many parts of the earth where heaps of *money*, more than all the world contains, could avail him nothing. The Laplander in the midst of his forrests is rich in the possession of numerous herds of Rein-deer, although he never saw, nor had any idea of gold or money; while the footy African, loaded with gold, or trampling upon the sands in which it abounds, is so wretchedly poor, as not to be able to procure the common necessaries of life.

* See *Essays on Trade and Commerce*, 8vo, printed for Hooper, 1770, in which this position is maintained with much seeming seriousness.

The truth is, money considered in itself is of no value.— But among civilized nations, who have found how convenient it is for facilitating the barter or exchange of one commodity for another, it has received an artificial value.—So that, although useless in itself, it has come to be accepted among all civilized nations *as a token, proving, that the person who is possessed of it, had given something of real value in exchange for it* * ; and is on that account accepted of by another in exchange for something that is of real utility and intrinsic worth.

As it is merely in consequence of mutual compact among mankind that money comes to be of value in any country, any substance may be employed for that use which a number of men may think proper to dignify with this stamp of their authority. Hence in some nations shells, in others glass beads, salt, pepper, cocoa-nuts, or human skulls, &c. have passed current as money. But in all the civilized nations of the world, gold and silver have now, by common consent, come to be considered as the most proper substances for this purpose, on account of the scarcity, durability, and other singular qualities of these two metals.

When a nation has come to a resolution to accept of either of these metals in exchange for every useful substance they have to dispose of, the quantity of either of these substances that can be given for any useful product, an ox or a sheep, for instance, will be in proportion to the quantity of these precious metals that shall be found in that country ; and must encrease or diminish, as the quantity of these metals diminishes or encreases. For the

* I find, that since the above was written, Lord Shelburne expressed my idea with more energy and elegance, when, speaking in the House of Lords, he calls money "*one type of property : Paper (he adds) is another.*"

whole of the money in any one nation must be sufficient to purchase all the exchangeable commodities of that country that are in the market at one time * : so that if the quantity of these metals is small in any country, a very little of it will be able to purchase a great quantity of the necessaries of life ; and if money abounds much in any place, a much greater quantity will be necessary to be given to procure the same commodities.

Hence it is evident, that two men inhabiting different countries, which both make use of these metals as a common medium of barter for all commodities, and each of them possessing the same sum of money, or weight of these metals, may be very far from being equally rich ; the one being possessed of a sum that is perhaps sufficient to procure all the necessaries and many of the conveniencies, while the other may not have enough to procure the bare necessaries of life alone. So that money and riches are merely relative terms ; and although they may in some cases be of equal import, yet as they may be often disjoined, they ought not to be confounded with one another.

Since therefore a very small quantity of silver or gold can answer all the ends of money equally well as if it were encreased to any assignable degree, it is a matter of no consequence to any

* I do not know if the above description of money is sufficiently accurate. To render it more so, let it be observed, that gold and silver, like every other commodity, will fall or rise in its price, according to the quantity that is to be sold, and the demand there is for it. The things with which we purchase gold or silver, are the produce of the soil, manufactures, or any other exchangeable commodity ; so that where these metals are scarce, a larger quantity of these commodities must be given for the same weight of metal, than where they are plenty ; or, what is the same thing, money will be of greater value.

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nation, whether it is possessed of a great or small quantity of these metals, if we regard only the *internal conveniency* of that state, considered as *altogether unconnected with others*. For if one grain of silver shall be sufficient to procure one day's subsistence for a working man, and will be accepted of by him as full payment for a day's labour, the man who possesses that single grain is virtually as rich as he who should possess a pound of silver, if he lived where that pound of silver could not procure more of the necessaries of life than would subsist a labouring man for one day.

But when we come to consider these nations as being connected with others around them by means of commerce, many are the consequences that would result from any considerable variation in this respect; and therefore they deserve to be pointed out with precision.

Let us, by way of example, suppose that there were two neighbouring states, in which the quantity of money in the one was to that in the other, as two to one; so that one piece in the one should be equal to two pieces of the same weight and denomination in the other; which, for the sake of perspicuity, we shall distinguish by the common appellations of *rich* and *poor*.

If the inhabitants of these two countries were to be employed in working up the same sort of manufactures, and were possessed of equal skill and conveniencies for carrying them on, *one* piece of money in the poor country would procure a certain quantity of the raw materials, supposing them of its own produce, equal to that which could be purchased in the other for *two*; and the wages of the labourers employed to manufacture it, would be in the

the same proportion ; so that the piece of work in the one would cost *two* pieces, and that in the other *four*, although confessedly of equal intrinsic value.

Let us now suppose, that the merchants of these two nations should carry their respective manufactures to a common market in a third country ; — is it not plain, that the poor nation could there sell its manufacture, and receive a handsome profit upon it, at a price much below the prime cost of the manufacture of the rich country ? and, by consequence their merchants would receive large commissions for more goods, so as to give full employment to all its manufacturers, while nobody could afford to purchase the manufactures of the rich country, except the inhabitants of it themselves.

And would not the inhabitants of the rich country, when they found that the manufactures of their neighbours could be afforded so much cheaper than their own, take every method in their power to obtain these manufactures from them ? and although these should be prohibited by law from entering the kingdom, would they not still find admission into the country, notwithstanding the most strenuous efforts to the contrary ? so that the manufactures of that place would quickly languish, the money would gradually leave the country, and the inhabitants would in a short time become as poor, and as capable of carrying on their manufactures with vigour, as their neighbouring nations ; if they should not be so unfortunate as to have a mine of these precious metals within their dominions, which would be a strong bar to their ever having it in their power to experience the happy effects that result from an active national industry.

No nation in Europe has been so unhappy as to experience a fate so nearly similar to this, as that of Spain, which, by the discovery of those rich mines in the Western world, that she proudly hoped would make her mistress of the whole world, has been gradually sunk to the lowest pitch of abasement that it is possible to imagine a country possessed of such advantages as she enjoys could ever experience.—Her manufactures, which were in the most flourishing state before that period, are now totally annihilated;—her commerce, which was then considerable, is dwindled into nothing;—her agriculture, which was spirited and vigorous, is entirely neglected;—her cities that then swarmed with millions of inhabitants, now only exhibit the melancholy remains of long lost opulence and splendor*;—her people,

* The difference between the antient and present state of other places in Spain, may be guessed at from that of Seville; which, according to Ustaritz, at a moderate computation, employed about 60,000 persons in the woollen and silk manufactures, although it now contains only between three and four hundred manufacturers of silk and wool.—His words are as follows.

After having proposed a plan for re-establishing the manufactures, he proceeds to enforce it by the example of what might be done in Seville. “Mayormente
 “(says he) si estendiendo mas el discurso, advertiere, como siguiendo esta regla se
 “restituirà, v Gr. Sevilla, a su antigua esplendor, numerosa poblacion, embidia-
 “das riquezas, y emuladas opulencias, si, en lugar de los 300 u 400 telares de
 “feda y lana, a que se hallan reducidos, se retableciesen hasta el numero de
 “16,000 a que llegaron, y en que se conservaron muchas años (segun asegura
 “en sus representaciones la misma ciudad) los quales, siendo de texidos exqui-
 “fitos, y ordinarios, ocuparon tres personas à lo menos, uno con otro, haci-
 “endo en todo 48,000 operarios, comprehendidos los que preparan la lana, feda,
 “oro, y plata, y con las familias de algunas casados passaraan de 60,000 personas.
Ust. th. y. Prat. de Com. &c. p. 11.

And again, speaking of the ruin that is occasioned by the tax called *alcavala*, he mentions this city in the following terms. “En cuya comprobacion no puedo
 “dexar de especificar el exemplar de Sevilla, cuyos fabricantes de feda, por me-
 “dio

people, from possessing that vivifying spirit of liberty that results from universal plenty among all ranks, are now become the abject slaves of tyrannic despots, who alone possess to themselves the little money that flows through that country *.—— Dejected and spiritless, they either drawl out an insipid inactive existence, or fly to those unhappy regions, the source of all their woes, there to dig treasures that they can never enjoy, which tend to enrich other more fortunate countries.

From the above induction, it appears, that in consequence of the advantages that a cheap country enjoys, with regard to manufactures, if the inhabitants are not wanting in their own endeavours, every individual in the nation may find sufficient employment at all times, and thereby earn a comfortable subsistence to himself and family ; so that poverty will not be known in the land : and as money will thus flow in upon it from every quarter, in a short time it will become as plenty there, and of as little

“ dio de su Alcalde Alami y Veedores, siguieron pleyte el año de 1722, anté el
 “ superintendente de aquel reynado, alegando lo destruidos que se hallaban, sus
 “ maniobras reducidas ya a menos de 100 telares,” &c. *Ib.* p. 321. *ch.* 96.

* Should it be told, That Spain is poor, and money there of nearly as high value as in any other country in Europe, and that therefore the position in the text cannot be just ; I answer, It is true, the present poverty of Spain arises from the want of manufactures ; but these manufactures were ruined by the causes assigned in the text, and the unequal division of property that began to take place after the discovery of the new world.

When money can be obtained in great quantities by little labour, the slower and better means of obtaining it by manufactures and industry will always be neglected. Corruption, with all its dreadful train of ills, immediately follows ; the bulk of the people become sunk in indolence and misery, and a few riot in all the excesses of dissipation and extravagance.

value, as in the neighbouring nations around it ; after which time that country will possess no advantages in this respect over others, and must then be contented with its own proportion only of manufactures, without any hope of being able to outdo all its rivals in foreign markets.

Thus hath heaven planted unfurmountable barriers to the ambition of man, and hath said to the ambition of princes, and the immeasurable pride of nations, as well as to the raging of the ocean,—*Hither shalt thou come, and here shall all thy vain efforts be staid.*

It thus appears, that it is not the abundance of *money* that constitutes the supreme felicity of a nation, but the abundance of *labour* in it, and the activity of *all* its inhabitants, arising from a constant and steady demand for the several manufactures about which they are employed ; — that so long as this continues to be the case, whatever be the quantity of money in the nation at the time, every person in it will be easy in his circumstances, and happy in the enjoyment of the good things of this life * ; — that while the nation possesses a smaller quantity of money than its neighbours, its manufactures may continue to flourish in a high degree ; but that they must naturally decline, if ever the value of money there comes to be lower than among the neighbouring nations, were it not for other circumstances that sometimes counterbalance this one ; — that flourishing manufactures, and a gainful trade, by throwing the balance in favour of that

* It is here to be observed, that I all along suppose the nation alluded to is capable of producing the necessaries of life, particularly provisions within itself. The case would evidently differ much, if it were obliged to purchase them from another country.

people,

people, will naturally encrease the quantity of money in it, and lower its value; and, if not checked in time, would at length destroy the manufactures of that country, and render the *people* in the first place miserable, and end in the utter ruin of the state; — after which it may again revive, flourish, and decline by another similar revolution.

Such are the changes to which all sublunary things must be continually exposed.

The real patriot, therefore, who wishes to promote to the highest degree the prosperity of his country, and the felicity of his fellow-subjects, which to him are synonymous terms, will not so much aim at filling the nation with unavailing heaps of splendid ore, as at preserving the country as long as possible in such a state as promises best to promote the industry and activity of the people. And as he knows that if all the money that comes into the nation by a continually gainful trade should be accumulated there, it must at length frustrate his aim; — he will be well pleased to see some channel opened by which the superabundance of it may flow out again; and will be exceedingly happy if he discovers a mean by which this can be effected without corrupting the morals of the people; which luxury, the most necessary attendant of too much money, and the most obvious mean of dissipating it, has a powerful tendency to do.

Considered in this point of view, the East-India trade may be looked upon as of some utility to Britain and the other industrious nations in Europe, by having opened a channel through which the superfluous money obtained by our gainful trade with other European states may freely be emitted, there to be buried,

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never more, we hope, to return. By this means the inconveniencies that must have resulted from the vast influx of the precious metals into Europe since the discovery of the new world, have in a great measure been obviated.

The great Montesquieu foresaw, and accurately pointed out, the bad effects that must have resulted to Spain, and he might have added other manufacturing nations in Europe, from the accumulation of money that was to be expected would ensue from this cause: — but he did not foresee, that this outlet for it would be opened; by means of which many of *these* bad effects have been prevented*.

The ideas here suggested concerning the influence of trade, are so contrary to those usually entertained on that subject, that it may be necessary to illustrate them a little further by some examples, to prevent them from being looked upon as fanciful paradoxes.

* Considered in this light also, the vast sums of money that have been expended in Germany by our many expensive wars on the continent, will not perhaps appear to be so detrimental to the country as is commonly imagined; seeing it does not tend in the smallest degree to interrupt our manufactures, and the general industry of the nation; but, on the contrary, to promote both of these in a considerable degree, by tending to keep the value of money higher here than it otherwise would have been, while at the same time it augments the specie, and diminishes its value in the neighbouring states.

This, you will say, is a very unusual way of estimating the benefits of commerce. It is so; but it is also sufficiently evident, from the principles above explained, that a nation which has a gainful commerce, must soon have its manufactures entirely ruined, were it not for some such outlets as these, or for luxury, which must for want of these gain footing, and draw off the superfluous money that it possesses. But as luxury has a natural tendency to enervate the body, and corrupt the heart, any other method of effecting the same end ought to be adopted in preference to it.

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It is commonly imagined, that every trade is gainful to a nation that brings in a balance of money to that nation; and the value of such a trade is always estimated by the sums of money that it receives in balance. This, however, I consider as a fallacious mode of reasoning. For if it be allowed, that the numbers of people constitute the real strength of every state, it will be acknowledged, that that strength can only be augmented by such means as tend to promote the vigour and energy, the happiness, and consequent fecundity of these people. Every aim of sound policy therefore ought to be directed towards that end.—Commerce,—manufactures,—even agriculture herself, were it possible to suppose a case in which it could happen, become pernicious the moment they do not tend to contribute to that ultimate aim of political wisdom.

But if a gainful commerce could be supposed to continue without interruption for any great length of time;—if the balance of trade continued to flow constantly in favour of that nation, money would quickly become of so little value, as to enhance the price of every article of life, and of every manufacture, to such a degree as would tend to retard the exports of manufactures of every sort, which would affect the whole body of manufacturers.—Foreign goods would then force themselves into the country in spite of the severest laws that could be made against them; and thus the poor of every denomination would be thrown out of employment, and by consequence become idle, graceless, and miserable.

Still, however, the merchants, by pushing on trade to a great degree; by importing and re-exporting, might continue to bring
vast

vast sums of money into the nation, and accumulate riches to an astonishing degree;—while the people,—the only true riches of the state, were reduced to misery.

Such, in all probability, was the state of ancient Tyre. Such for certain was the state of Carthage, which, from this mistaken idea, that riches could constitute the strength of a state, suffered her *merchants* to be exalted to the highest degree, while her *people* were miserable slaves. But when the trying hour of danger came, — when she was surrounded with difficulties on every side, — she felt her internal weakness: — her own people deserted their oppressors, and assisted the victorious foe; — her mercenaries forsook her and fled; — and she felt, when too late, that she had trusted to a pointed rod, which, when she was obliged to lean upon it for support, pierced her to the heart, and made her fall like a mighty monument erected by folly upon the unstable sand, which, when it was fiercely assailed, tumbled headlong a stupenduous ruin, the wonder and astonishment of all surrounding nations.

Let us not therefore deceive ourselves by false appearances.—A nation may carry on a gainful trade, while its strength and vigour are declining.—Its merchants may be enriched, while the state becomes nerveless and exhausted.—Its great men may be wallowing in luxury, while slavery approaches with hasty strides; or may be intoxicated in the giddy whirl of varied amusements and refined delights, when it stands tottering on the very brink of destruction.

Since then too great an abundance of money has such a naturally pernicious tendency on a manufacturing country, what can we say as to the wisdom of those, who, not content with the sums of

money that flow into the nation by means of its trade, endeavour to encrease the bad effects of a superabundance of it, by creating an imaginary money; which, by answering the same purposes as *real* money *within the nation*, produces mischiefs of the same kind that it would occasion, without being accompanied with all its beneficial effects? For being created without almost any effort, it does not promote the industry of the people; — and by lowering the value of money, tends, as far as its influence can reach, to retard its manufactures.

You will easily perceive I here speak of *paper-money*, which in one sense may be viewed as a mine of gold or silver discovered by some person in the country, that could be wrought without almost any labour or expence. It may serve indeed to enrich a few individuals who have made the discovery, while it hurts the country at large, and impoverishes in so far every person who has no immediate concern in the undertaking. A country may be ruined,—but seldom can be improved by this means.—How cautious therefore ought a poor nation to be of adopting this specious but dangerous mode of improvement! Like a dram of strong spirits to a man of a broken constitution, and vitiated palate, it may seem agreeable at first, and afford a temporary flush of vigour that may be mistaken for returning strength, while it only tends to hasten that fatal catastrophe that it was meant to prevent*.

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* Some people understand by the phrase *paper-money*, all bills, bonds, and every other writing containing an acknowledgement of debt due by one person to another.— But this is by no means the sense I wish it to bear in the text.— For as such acknowledgements of debt do not perform the functions of money, and are only a commodious mean of transferring that or other property from one person to another, they may be encreased in a nation almost to any degree, without affecting

I hope these observations will satisfy your friend, that a country in which money is scarce, and therefore of great value, possesses many real and incontestable advantages for carrying on manufactures,

the value of silver or gold in the least.—It is perhaps because *paper-money* is sometimes issued in the form of bills that these have been confounded.

Paper-money then, in the strict and proper meaning of the phrase, can only be applied to denote those pieces of paper which are stamped by the authority of the legislature of any kingdom, and, without bearing interest, or being payable on demand, are ordered to pass current, as of equal value with certain pieces of real money of gold or silver of a known weight and denomination; — and which are by the authority of the same legislature declared to be a legal tender of payment on all occasions, for the sums they respectively represent. These pieces of paper in that case assume the province of current coin within the districts subjected to that legislature; and are therefore in strict propriety entitled to the name of *paper-money*. The provinces of America have afforded several instances of this kind of coinage, by which they would have been totally ruined, if not prevented by the timely interference of the mother-country.

The immediate consequence of a plentiful coinage of this paper-cash is, that the current specie in the country is much augmented, and by consequence its value is proportionably diminished.—Home manufactures, and the native products of the country, are thus rendered dearer than formerly; and foreign goods, retaining the same nominal value, become therefore cheaper; by which means the national industry receives a check, and foreign industry is encouraged.—On this account the *real* coin is gradually drawn out of the country to pay for these foreign commodities; so that in a short time, if not prevented, little but the paper will remain. When this comes to be the case, *real* specie comes to be in such request, that no one who has it will part with it for paper-money of the same denomination, unless he gets a premium for it. In this manner the value of the paper-money comes gradually to decrease; and will continue to fall at length almost to nothing at all, unless some measures are taken to guard against it. And as the persons who hold that paper-money at the time that it decreases in value, lose the whole of that decrease, the public are thus gradually cheated out of their property; but as this may come by slow and imperceptible degrees, they often feel the pressure of the ills that it occasions before they are sensible of the cause from whence it proceeds.

Such

nufactures, over another where it abounds more, and where the necessaries of life cannot be procured at such a moderate price. On which account it will be allowed, that the northern parts of Scotland

Such a coinage, therefore, although it serves to fill the coffers of those who issue it, and gives a temporary flush of money to all ranks of people, becomes in the end exceedingly pernicious to the state.—It is exactly similar in its effects to those reductions of the weight or fineness of the coin, by means of which the needy monarchs of Europe used in former times to fill their coffers without the knowledge of their subjects; with this additional inconvenience, however, that by an artful management, the bad effects of the paper-money may be longer concealed, and by consequence must convulse the state to a much higher degree when it comes to be discovered.

The notes issued by our banks in Scotland are not in strict propriety entitled to the name of *paper-money*, although they are so *in part*. For as these notes are payable upon demand, there is a necessity of keeping a quantity of specie at the several bank-offices always in readiness to pay these when presented; so that if the notes issued never exceeded the cash on hand, they would be strictly banks of deposit, like that of Amsterdam, and could not affect the value of cash in the smallest degree. They would only differ from foreign banks of deposit, in that these admit of transfers only in their books, whereas with us these transfers are made by exchanging their notes. Bills and bonds of every denomination, it is plain, are all only means of transferring funds actually deposited.

But in so far as our banks issue notes to a greater amount than the cash they keep on hand, their notes resemble paper-money, and are attended with advantages and disadvantages of the same kind with legal paper-money, although in a lesser degree.

For if, by issuing a great number of notes, any bank should sensibly lower the value of money within the reach of their circulation, so as to make cash begin to be scarce in that part of the country; as soon as people found difficulty in getting cash for these notes from other persons, they would be obliged to bring them to the bank-office; and this would subject the bank-directors to the necessity of bringing cash from other places to answer this demand upon them; which would be attended with so much expence as could not fail soon to induce the bankers to suppress many of their notes, so as to bring themselves nearer to the state of a *bank of*

deposit.

Scotland are more favourable for manufactures than any part of England. But lest he should think that I have not taken a proper notice of the objection he has made, the following observations

deposit. Neither is it possible for their notes ever to sink in value, unless the company shall fail entirely; so that it is impossible for this kind of paper-money ever to be attended with such baneful influences as the other.

It operates, nevertheless, in the very same manner, and unless managed with great caution, produces effects that distress the society in a very sensible degree. For, while cash happens to be plenty in the country, there is no difficulty of issuing notes to a much greater value than the cash on hand; which notes may be kept in the circulation a long time without returning to the bank. And as this is an apparent advantage to the undertakers, short-sighted managers may misjudge the matter so far as to endeavour to push the circulation of their notes as much as they can. By this means the country experiences a sort of glut of money, which soon lowers its value, and drains off the specie. The inconveniences that this produces are first felt by the bank itself, which soon finds itself under the necessity of quickly calling in almost all its notes; and the *vacuum* that this occasions in the circulation, and in the supposed capital of many individuals, is attended with the most serious and destructive consequences.

The issuing of notes, therefore, although of immediate apparent advantage to a banking-company themselves, whenever it exceeds the cash on hand, immediately operates as *paper-money*, and becomes hurtful to the state in proportion to its amount. But as it is not safe for the bankers themselves to push this very far, the general hurt to the state by this means, unless on extraordinary emergencies, cannot be very considerable.

But as this is not the only, nor perhaps the most profitable branch of the banking-business, it ought by no means to be implied, that I look upon banks as useless to a country. These companies, by facilitating the operations of *exchange*,—by discounting bills,—by granting credits with judgement, &c.—procure for individuals such an entire command of their own funds, as facilitates the operations of manufactures and commerce in a surprising degree.—On these accounts every attentive person must be sensible, that, when under judicious management, *banks* are always attended with very great benefits to those places in which they are established.

This explanation I thought necessary, lest what is said in the text might have been misunderstood.

are

are added, to afford him further satisfaction with regard to that particular.

It has been already observed, that a temporary rise in the price of provisions in any country, must naturally produce a greater degree of industry among the labouring people,—and that a temporary fall in this respect must as necessarily produce a contrary effect. But if this advanced price was to be long continued, the labourers finding themselves too much straitened in their circumstances, would either insist upon having more wages, or they would leave that country, where they could not earn a comfortable subsistence, and seek their fortune in foreign regions.

This is supposing the master-manufacturers had entered into an iniquitous combination among themselves, not to raise the wages of their labourers on any account; and should prove such staunch friends to one another, as to adhere strictly to such a resolution. —But to the glory of humanity, and happiness of mankind in general, it may be observed, that such iniquitous associations never were, or ever will be lasting. When the master-manufacturer and merchant reap great profits, it will be impossible for some worthy man among them to see his labourers in misery and want, and not minister to their relief by a small augmentation of their wages. But if this should not be the case, is it to be doubted but that other men, seeing the great profits that was made by these people, would wish to share in these profits, and by engaging in this business, outbid the old manufacturers to procure labourers to themselves? and as every man wishes to have as large a share as possible of a gainful trade, the wages would be gradually raised by a competition with one another, to as great a height as the profits of the business would admit of.

In

In this manner does every temporary scarcity produce a momentary profit to the master-manufacturers, and a lasting detriment to themselves and the nation in general; for if the prices of work are once raised, it is acknowledged that they must be rather further augmented than lowered when plenty comes. On which account it becomes necessary to advance the price of the manufactures in foreign markets; which slackens the demand for them, and is the cause of much uneasiness, that often ends in tumults and bloodshed at home, before a proper remedy can be applied.

To avoid these evils, it ought to be the study of every wise and humane legislature, to provide with the most cautious foresight against any considerable variation in the price of the most necessary articles of life for the labouring poor,—but above all in the price of bread-corn, which is with justice emphatically styled *the staff of life*.

Nor can any nation produce a system of legislation equal to that of Great Britain in this respect. A system that has been pursued for some time past with a steadiness that does honour to the discernment of the supreme council of the nation, notwithstanding the futile declamations of narrow-sighted politicians, who are continually inveighing against the bounty for exportation, and the other corn-laws in force at present, as the cause of almost every misfortune of the nation: yet true it is, that Britain does not possess such a decided advantage over the nations around her in any other respect, as in what relates to her corn-laws; nor has perhaps any other circumstance contributed so much to her prosperity for a century past as this has done.

It has been already showed, that if we wish to secure our manufactures

nufactures in a flourishing state, it is absolutely necessary that bread-corn, and the other necessaries of life, should be at all times in such abundance in the country, as to be afforded to the manufacturer at a price so moderate as to be always within his reach ; and the less variation there is in this respect, so much the better. But in what manner could these purposes be effectuated near so well, as by allowing a bounty for exportation when the price is too low, and admitting of an importation when it is too high ?

It has been already said, that agriculture, like every other manufacture, can only flourish when there is a constant and a steady market for its products. By means of these laws, no man is afraid of ever overstocking the market.—He is sure of always getting his whole crop sold at a moderate price, and therefore exerts himself to the utmost of his power to rear as extensive and as weighty crops as possible. And is not the perpetual abundance in the nation that is produced by this means, the best security that the manufacturer can ever have, that he can never experience a severe scarcity ?

But were the farmer either prevented from exporting when prices were moderate, or deprived of the bounty when very low, what would be the consequence ?——When a crop was abundant, the whole people in the country could not consume nearly the whole quantity of grain produced. ;—the markets would be overstocked ;—the farmer could not sell his grain ;—the prices of course would be exceedingly reduced ;—manufacturers would turn idle and insolent ;—commissions from abroad could not be executed in a proper time by our manufacturers ;—and foreign merchants would be obliged to apply to other markets for these goods ;—farmers would be unable to pay their rents ;—proprietors

tors would be distressed for want of these, and the whole nation would be thrown into the most violent ferment that could be imagined.—But the evil does not rest here.

When the farmer experienced such grievous distress from a glut of the market with corn,—it is not to be imagined that he would proceed with alacrity in his preparations for another crop. Timid and irresolute, his labours would be feeble, and he would even wish that succeeding crops should not be so abundant. In these circumstances little grain would be sowed, and the ground for that little imperfectly prepared; so that whatever season followed, the crop could not be abundant; but if the season should prove unfavourable, half the quantity of grain that was necessary for the sustenance of the inhabitants would not be produced, and inevitable famine must be the consequence.

It is unnecessary to paint the cruel distress that must attend such a calamity;—but this calamity in these circumstances would be unavoidable. Thus prices fluctuating perpetually from one extreme to another,—the farmers and other labourers would be alternately involved in the most abject poverty, or wallowing in destructive plenty. Nor would it be possible to carry on any considerable manufacture in a nation so circumstanced as this.

Such, however, was the miserable state of Britain for many ages before these salutary laws were enacted; and such, in some measure, at present is the state of some modern nations, which hardly stand in need of any other circumstance, but a steady adherence to such a system of legislation, to outrival us in almost every branch of manufactures. In these unhappy times it was no unusual thing for the price of grain to be ten times as high at

one time as it had been only a few months before,—and sometimes thirty or forty times the price that it usually sells for at present *; whereas now the greatest variation that is ever experienced, hardly at any time amounts to one third of its usual price.

Might not the British nation of old be with propriety compa-

* The assertion in the text may perhaps appear so extraordinary, as to require a particular illustration. The following facts, selected from many others of the same sort that may be seen in Fleetwood's *Chronicon pretiosum*, will, I hope, prove satisfactory.

In the year 1316 wheat fell from L. 4 to 6 s. 8 d. per quarter; i. e. to one twelfth of the price it bore within a few months; — and this 6 s. 8 d. was above three times its usual selling-price at that time.

Again, anno 1361 wheat was sold at 2 s. per quarter, although in 1359 it was so high as L. 1 : 6 : 8; which is more than thirteen times the former price.

And so late as anno 1557, wheat before harvest sold for L. 2 : 13 : 4; and after harvest for 8 s. per quarter.

In the year 1455, wheat sold for 1 s. 2 d. per quarter; in 1434, for L. 1 : 6 : 8; in 1387, for 2 s. — 1316, L. 4; — 1288, at 8 d.; — and in 1269, at L. 6 : 8 : 4, per quarter. Thus the prices were at one time 193 times more than at another; — and if allowance is made between the weight of the shilling in the year 1455 from what it was in the year 1269, as appears by the table in the appendix, it will be found, that the L. 6 : 8 : 4 at the last period, contained as much silver as nearly two hundred shillings at the former; so that the quarter of wheat was really at one time near three hundred times the price that it cost at the other. What would be the dreadful consequences if the variations in this article should be in any respect approaching to this at present!

By the same table it appears, that the L. 6 : 8 : 4 in the year 1269, contained as great a weight of silver, as about L. 20 Sterling at present; and if it be supposed that the value of money was at that time only three times what it is now, — a quarter of wheat would then cost a sum equal to L. 60 now. — But the medium-price of wheat now does not exceed 30 s. or 31 s. per quarter; so that the price was sometimes forty times more than the usual price of this necessary article of life in our days.

red in this respect to a mill that had been erected by an ignorant mechanic upon the principal bed of a mountain-stream, without either reservoir or sluices, that was useless one part of the year on account of the want of water, occasioned by the summer heats,—and at other times of the year could be of as little utility by reason of the prodigious superabundance of water; so that the inhabitants could only be benefited by it for a few days in the year, and these so uncertain, as to make it be almost entirely deserted? whereas now it resembles a mill constructed by a skilful architect upon the banks of a copious river, which never wants a sufficiency of water to keep it going even in the driest weather in summer, and, by means of sluices properly contrived, never admits more water than is beneficial for the mill at any time; a proper outlet being contrived, by which the superfluous water is at all times thrown off with facility, so as never to interrupt in any degree the operations of the mill. Thus abundance without superfluity is at all times secured to the inhabitants, and they are permitted to carry on every domestic employment with tranquillity and ease*.

It was from the contemplation of these beneficial consequences that have accrued to Britain from the influence of our corn-laws, that I was induced to bestow the high encomiums I formerly did upon the wisdom that influenced the supreme council of our nation with respect to this subject. Nor could I help remarking with some sort of amazement, that the same body of men should have adopted a spirit of legislation so diametrically opposite to this with regard to our wool, and should have so long persisted in it in spite of the experience they had had of the beneficial effects of

* See this subject more fully discussed in the Postscript to this letter.

the one, as well as the baneful consequences that have resulted from the other.

The mind of Lewis XIV. of France was too narrow to be able to grasp the great idea that animated them in the first instance; but their conduct in the other respect was perfectly adapted to the meanness of his understanding; so that he imitated them in this particular in many of his edicts.—Among others, the owners of flocks in France were restricted from selling their wool to any others than the manufacturers in their neighbourhood. The consequence of which was, that the wool-growers neglecting that branch of culture, wool became scarce and dear, which in the end entirely ruined the manufactures of several places in Picardy, Artois, Hainault, French Flanders, &c. *.—And other restrictions of

* “ La qualité des étoffes est assez ordinairement déterminée par la nature des laines qu’on recueille dans les provinces où elles existent. Il y a toujours moins de profit & de commodité à employer des laines étrangères que celles des lieux. On évite par-là les frais de transport, & on a l’avantage en tirant de la première main, de prévenir les fraudes que les circulateurs & les entremetteurs ont coutume de faire pour donner le change aux acheteurs.

“ Cette vérité a été tellement reconnue, qu’on en a voulu faire une loi. Il y a des reglemens qui défendent aux propriétaires des troupeaux de vendre leurs laines à d’autres entrepreneurs, que ceux des manufactures voisines de leur résidence.

“ Tant que la contrainte n’a pas suivi cette disposition, l’intérêt commun du cultivateur & du fabricant en démontrait l’utilité, & en assûroit l’exécution. Mais dès qu’on en eût fait une règle de conduite, dont on ne pouvoit plus s’écarter sans encourir des peines, le cultivateur entra en défiance, & crût qu’on vouloit faire pencher la balance du côté du marchand, & le favoriser à son préjudice. L’effet de ce reglement fût contraire à celui qu’on croyoit pouvoir en attendre.

“ La matière première devenant plus rare & plus chère, nombre d’entrepreneurs furent obligés de quitter la partie, & de se livrer à d’autres genres d’occupation.

of the same sort were producing similar effects in other parts of the country, till the ministry of late perceived the error of their predecessors, and by repealing these restrictive edicts in many instances *, have brought the manufactures of France to a much more

“ Cette espece de révolution a causé la ruine de bien des ateliers qui existoient à la fin du siècle passé dans la Picardie, dans l’Artois, dans le Haynault, et dans la Flandre Françoisse.” *Traité des bêtes à laine*, p. 817.

Again, he observes to the same effect, p. 695. when speaking of the manufacture of temmies at Mans in the province of Maine. “ La laine qu’on payoit dix-huit à vingt sols, vaut presentement trente cinq à quarante sols & plus ; la hausse de ce prix vient de la rareté de la matiere, met le manufacturier dans la nécessité de vendre son étoffe plus chere, &c.

“ Apres l’année 1749, où l’introduction des laines étrangères fut permisé par les arrêts des 12me Novembre & 9me Decembre de la même année, qui exemptent de tous droits les matieres premieres venant de l’étranger, on fit entrer dans la Maine beaucoup de laines de Barbarie, qui revenoient à très bon compte.

“ Mais il arriva qu’en alimentant des laines du Levant les manufactures, on laissa aux cultivateurs celles dont ils avoient eu jusques-là un débit réglé & assuré, ce qui les obligea à ne plus penser qu’aux deux objets de la boucherie & du fumier, et leur fit negliger le soin de la laine.

“ L’étranger s’appercevant que l’étoffe n’avoit plus la même finesse, & la même bonté, cessa d’en tirer la même quantité.

“ Il paroît que ce temps est l’époque du découragement des cultivateurs, & d’un changement prejudicable à la propogation des bonnes especes, dont la diminution emporte nécessairement le rencherissement des bonnes laines.”

This is a case so parallel to that of England, and its effects have been so similar to what has been experienced there, that I could not refuse myself the pleasure of quoting it.

* After having told that the province of Roussillon was in the custom of carrying on a considerable commerce with Spain for the sale of fatted sheep, Mr Carrier observes, that “ ce commerce fut interrompu en 1711 à l’occasion d’une mortalité de bestiaux, qui desola le Roussillon, & les autres provinces du royaume. On crût alors que la conservation des especes demandoit qu’on en défendit l’exportation

more flourishing state than most of the subjects of Britain would be

“ portation chez l'étranger. Un arrêt du conseil du 15^{me} Juin 1711 porte cette
 “ défense sous des peines rigoureuses. La prohibition fut confirmée d'année en
 “ année jusqu'en 1717.

“ La France ayant été affligée d'une autre epidémie générale en 1740, on eut
 “ recours au même expédient. Le conseil rendit le 7^{me} Juin de cette même année
 “ un arrêt, qui défendoit la sortie & la vente du bétail hors du royaume, sous
 “ peine de confiscation, & de trois mille livres d'amende.

“ Cet état de prohibition subsistoit encore vingt ans après : & le Roussillon en suf-
 “ fisoit plus qu'aucune autre province, étant privé par là de débouchés pour le
 “ commerce de ses troupeaux d'engrais. Les cultivateurs, n'ayant d'autre res-
 “ source que les boucheries du pays pour la vente du gras, prenoient le parti de
 “ faire passer leurs bestiaux en fraude dans les provinces frontiers d'Espagne, où
 “ ils vendoient plus avantageusement.

“ Une saisie de trois mille moutons, qui fut faite en 1762 sur des pâtures qui
 “ traversoient les montagnes pour arriver en Espagne, donna lieu au conseil de
 “ connoître, que le règlement rendu en 1740 dans la circonstance de l'epidémie
 “ auroit dû être révoqué après la cessation de ce fleau, parce que le meilleur moyen
 “ de réparer les pertes de ce genre, est de laisser aux cultivateurs la liberté des
 “ remplacement, & de les encourager par l'espoir d'une vente avantageuse, soit à l'é-
 “ tranger, soit aux régnicoles, ce qui ne peut avoir lieu dans l'état de prohibition
 “ qui prive le colon de la facilité de tirer le meilleur parti de ses productions.

“ Ces considérations déterminèrent le conseil à rendre un arrêt le 17^{me} Aout
 “ 1763, par lequel il est ordonné qu'à l'avenir les bestiaux pourront librement
 “ sortir à l'étranger & venir de l'étranger dans le royaume, en payant seulement
 “ pour tous droits, tant à la sortie, qu'à la rentrée, un demi pour cent de valeur ;
 “ les déclarant au surplus exempts de tous droits de la circulation dans les diffé-
 “ rentes provinces du royaume. Et à fin d'éviter les difficultés qu'une évaluation
 “ arbitraire pourroit faire naître dans les bureaux des frontiers, le Roi fixé par le
 “ même arrêt la valeur & le droit de chaque espece.

“ Ce règlement produisit l'effet le plus avantageux dans toutes les provinces du
 “ royaume. Les choses changerent bientôt de face dans le Roussillon. L'ancien
 “ commerce reprit vigueur, & reparut avec plus d'activité que par le passé, à cause
 “ de la modicité des droits, dont la fixation sur le pied de la valeur des pieces de
 “ bétail ne dépendoit plus de l'idée des préposés aux bureaux de sortie. A la fin

“ de

be willing to admit of *. And if they should at length adopt, and steadily adhere to our system of corn-laws, every thing is to be feared

“ de l'année 1766 on faisoit état dans un seul bureau de sortie de vingt-quatre mille bêtes exportées à l'étranger.” *Traité des bêtes à laine*, p. 597.

* “ Les draps noirs de Sedan l'emportent présentement en finesse sur ceux qui sortent des premiers ateliers d'Angleterre et de Hollande.” *Ib.* p. 745.

“ Le commerce des seuls draps Londrins exportés dans le Levant produisent annuellement aux négocians du Languedoc pour plus de vingt millions d'affaires.” *Ib.* p. 844.— If by *affaires* here is meant *livres*, the amount is near 1,000,000 l. Sterling for *draps Londrins* alone exported annually from Languedoc.

We learn from the same author, that, in the year 1766, Sedan, and the places depending on it, employed 979 cloth-weavers, and fifty-six looms for serges; and that the manufactures of that place were that year valued at 6,279,578 livres; and that, in the year 1767, they were valued at

					<i>Livres</i> 6,952,574
Reims manufactured goods that year, valued at	-	-	-	-	6,800,024
Chalons in the same year,	-	-	-	-	562,184
Troyes in the year 1766,	-	-	-	-	2,400,783
Rhetel, in the year 1767,	-	-	-	-	218,188

Total amount of the manufactures in Normandy, 16,933,753

In the generality of Rouen, comprehending the capital, Elbeuf, Louviers, Andelis, &c. *année commune*,

					<i>Livres.</i>
18 a 1900 draps, valant pres de	-	-	-	-	7,000,000
3500 a 4000 pieces espagnolottes, 1,200 a	-	-	-	-	1,500,000
4000 a 4500 p. de flanelle, 360 a	-	-	-	-	400,000
5000 p. de frocs,	-	-	-	-	500,000
480 a 500 pinchinats,	-	125 a	-	-	130,000
450 a 500 ratines,	-	230 a	-	-	260,000
250 a 260 serges,	-	23 a	-	-	24,000

Dans le generalité de Caen,

11 a 1200 draps,	-	8 a	-	-	900,000
7 a 8000 pieces d'estoffes,	-	-	-	-	600,000

Carried forward 11,314,000

feared from that potent rival in manufactures, if we do not strenuously exert ourselves, so as to neglect none of those advantages that Heaven has given us over them.

If France and England, in some instances, have hurt their manufactures, by endeavouring to give them an undue ascendancy over the interests of agriculture, — I should be sorry to think, that the gentlemen of Scotland should come to hurt the interests of agriculture in this country, by endeavouring to encourage it too much, and by giving it an undue preference to manufactures, which they seem to aim at a little too much by some late laws that have been passed with regard to Scotland; I mean the law passed in 1773, by which the ports of Scotland are always ordered to be shut

	Brought forward,	11,314,000
Dans le generalité d'Alençon,		
600 pieces de draps,	- - - -	72,000
38 a 40,000 pieces d'étoffes, valant,	- - - -	2,300,000
Total in the generality of Rowen, Alençon, and Caen,		13,686,000
In Normandy,	- - - -	16,933,753
		30,619,753

Thus do the woollen manufactures in this very small district of France amount annually to the value of nearly 1,500,000 l. Sterling.

This author concludes his review of the woollen manufactures of France with this remark.

“ A l'avènement de M. Colbert au ministere, il sortoit de France, année commune, pres de quatre-vingt millions, d'aujourd'hui, qu'on payoit à l'industrie de l'étranger en emplettes de draps fine & de plusieurs fortes d'étoffes.

A la fin de l'administration de M. Trudaine, on faisoit état de cent soixante dix mille pieces de draps sortant annuellement des manufactures de France, évaluées à vingt-huit ou vingt-neuf millions, & de 760 a 770 piécés de toutes fortes d'étoffes, valant

shut against importation of oat-meal when the price of it is not above sixteen shillings per boll.

It seems evident to me, that this law has been obtained with a view to keep up the prices of corn in this country at that high rate, which every one must allow is above the medium-price of this kind of grain. It was perhaps imagined that this would encourage agriculture, enable tenants to give higher rents, and thus tend to promote in a high degree the interests of men of landed property.

I would be sorry to think, that an idea so narrow as this is, should

valant 54 a 55,000,000, ce qui donne un produit total de 82 a 84,000,000,"— or about 4,000,000 *l. Sterling*, which France now annually gains by her woollen manufacture.

"Ce calcul est independent du prix des étoffes communes à l'usage du bas peuple, que les ménagers & les gens de campagne ont l'habitude de faire fabriquer par des tisserands, auxquels ils livrent la matiere premiere."

Thus it appears that France, in less than a hundred years, has improved her woollen manufactures so much, that, instead of importing from others to the value of 80 millions of livres, she now exports to the value of 84 millions annually; which is a gain to the nation of 164 millions, or about 7,500,000 *l. Sterling*; and her annual exports, now amounting to near 4,000,000 *l. Sterling*, is perhaps greater than the annual exports from England, as appears by the following custom-house-entries as low as the year 1743.

Woollen exports from England.

1739,	————	L. 3,218,273
1740,	————	3,056,720
1741,	————	3,669,734
1742,	————	3,358,787
1743,	————	3,541,558

ever

ever be heedlessly adopted by such a truly respectable body of men as the representatives in parliament for Scotland will be allowed to be. To aim at separating the interests of manufactures from that of agriculture, is like endeavouring to separate the shadow from its substance ; — and every attempt to do this, as it is at the same time foolish and unjust, must end in the disappointment of its projector, and prove detrimental to the interests of those very persons it was most intended to serve.

We have already had occasion to see this maxim confirmed by many examples. — Nor is it difficult to foresee, that this instance will soon furnish another, if the policy adopted should be continued for some time : for if grain, by this means, should be kept up at a high rate for a few years, many men would be induced to take farms at a pretty advanced rent, in the hopes of its continuing, and would exert themselves as much as possible to rear abundance of corn. — By this means, with ordinary seasons, more corn will be reared than the people of the country can consume ; — the markets will be overstocked ; — prices will be reduced extremely ; — these tenants will be unable to pay their rents ; — and the proprietors, and the country in general, be reduced to a much worse state than if no such law had ever taken place *.

It ought therefore to be instantly repealed, before these baneful effects can have taken place, — and a new system of laws for this part of Scotland be introduced in its stead, calculated to preserve grain as much as possible at the medium price, without allowing

* See this subject more fully treated of in the Postscript to this letter.

it to go sensibly above or below it,— which will prove to be in the end most highly beneficial to all orders of people in the country.

When equity influences the councils of a nation, the laws that they enact will seldom fail to prove beneficial to all the members of the community.

POST-

P O S T S C R I P T

T O

LETTER THIRTEENTH.

Q q 2

C O N T E N T S.

An examination of the objections brought by Dr Smith against the bounty on exportation of corn in England.—The bounty does not, as he alledges, raise the price of corn higher than it naturally would be both in years of plenty and in years of scarcity;—it only prevents it from falling immoderately low in the one case, or rising excessively high in the other case.—The bounty is attended with no peculiar advantage to the merchant importer and exporter of corn.—It does not encrease their business.—The importation is not augmented by an encrease of exportation, but directly the reverse.—Illustrated by examples.—It does not prevent the surplus of one year from relieving the deficiency of another; but, on the contrary, it is the only practicable means of making the great plenty of ordinary crops effectually supply the deficiency of one that is unusually scanty.—It has a natural tendency to moderate the price of grain upon the whole,—and to keep the market much more steady than it naturally would be.—The bounty operates in the same way as an insurance-premium in any other hazardous trade.—Beneficial effects that result from this arrangement.—Hints tending to render the corn-laws still more perfect, and more beneficial to the country.—The above reasoning corroborated by facts.—Other objections examined.—The parallel drawn by Dr Smith between the influences of the English corn-laws and the laws of Spain and Portugal, with regard to the precious metals, does not apply.—Difference between the commerce of grain, and that of almost every other article.—Other objections considered.—The bounty really tends to encourage the production of corn, and is truly a bounty on production.—It does not serve to bolster up an unprofitable commerce,—but to regulate a commerce that never can be stopt, without producing the most fatal consequences.—The bounty in fact costs the nation nothing,—but, on the contrary, tends to enrich it in the most essential manner.—Other positions examined.—Corn is not, strictly speaking, the commodity that regulates the price of all others.—Illustrated by various examples.—The price of corn itself is regulated in many cases by that of manufactures.—The real price of corn may be altered as well as that of every other commodity.—Facts directly contradict the whole of Dr Smith's reasoning on this head.—General conclusion.—The bounty on corn is perhaps the wisest political institution that has graced the annals of any country.—Proposal for amending the corn-laws with regard to Scotland.



P O S T S C R I P T

T O

LETTER THIRTEENTH.

On the nature and influence of the BOUNTY ON
CORN, and the other CORN-LAWS of Great Bri-
tain.

SInce writing the above, I have seen the very ingenious treatise
of Dr Adam Smith on the nature and causes of the wealth of
nations; and am sorry to find, that I have the misfortune to differ
in opinion from an author of such extensive knowledge, and liberal
sentiments, on a subject of so much real importance as that which
is here treated of. And as it may be supposed that the opinion of
such

such a respectable author will have great weight on the generality of mankind, it is of much importance to examine, whether that opinion has been adopted in consequence of just reasoning, or the reverse: for the wisest of mankind may be at times misled. Let this be my excuse for here endeavouring to investigate this subject with a more than ordinary degree of precision.

The reader will easily perceive, that the applause I have bestowed above on the general system of corn-laws in England, is founded entirely on the supposition that they are peculiarly calculated to prevent the fluctuation of the price of grain: — An object that will be allowed to be of the highest importance to the well-being of almost every individual of the state. This object seems, however, to have been entirely overlooked by Dr Smith, who considers the bounty on corn only as a contrivance calculated to enhance the price of grain, and thus to give an exorbitant profit to the farmer and corn-merchant: — Considerations which, if ever they influenced the legislature, it must be acknowledged, were little deserving their favourable notice, and which were entirely disregarded by me. This may in some measure account for our differing in opinion. But as it appears to me that Dr Smith's reasoning on this subject is not so strictly accurate as what we usually meet with in that valuable performance, I find it necessary to examine some of these passages with particular attention; and hope, that while I mean to proceed with that candid impartiality which becomes one who is in search of truth, I shall no where forget myself so far, as to lose the deference justly due to one of such a respectable character.

“ In years of plenty,” says he, “ it has been already observed,
“ the bounty by occasioning an extraordinary exportation, ne-
“ cessarily

“ necessarily keeps up the price of corn in the home market above
“ what it would naturally fall to. To do so, was the avowed
“ purpose of the institution. In years of scarcity, though the
“ bounty is frequently suspended, yet the great exportation
“ which it occasions in years of plenty, must frequently hinder
“ more or less *the plenty of one year from relieving the scarcity of an-*
“ *other.* Both in years of plenty and in years of scarcity, there-
“ fore, the bounty necessarily tends to raise the money-price of
“ corn somewhat higher than it otherwise would be in the home
“ market *.”—The hurtful effects of which general rise of
price, supposing it real, he afterwards points out at great length.

That the bounty has a necessary tendency to raise the price of grain, not only *somewhat*, but *a great deal*, higher than it naturally would be, in years of plenty, in the home market, will not be denied; but it has been already showed in the preceding letter, that this circumstance is attended with the most beneficial consequences; not to the farmer only, but to the state in general, and to almost every individual in it.—This circumstance, therefore, cannot be considered as disadvantageous.

If it tended, however, to raise the price of grain also in years of scarcity, it would indeed be a destructive institution, and ought to be immediately abolished: but that it tends as much to *lower* the price of grain in times of scarcity, as to *raise* it in times of plenty, will, I hope, appear from the following considerations.

If the bounty were withdrawn, it would of necessity follow,

* Inquiry into the nature and causes of the wealth of nations, vol. 2. p. 96.

that in years of plenty, the market being overstocked, prices would naturally fall; — not in exact proportion to the amount of the surplus quantity, but a great deal below it. For where there are many sellers and few buyers, it is well known, that in all cases, but more especially with regard to those goods that are of a perishable nature, as grain, the price will fall extremely below the ordinary rate.

When this should happen,— not to mention the general stagnation to the industry of the whole nation that would ensue, the farmer in particular would find himself thrown into the most disagreeable embarrassment. A part of his corn would remain on hand; and the low price he would receive for what he could sell, would be so far from replacing to him the whole of his outlay, with the ordinary profits of stock*, that he would find himself unable to prosecute his ordinary employment with profit.

Let us, however, suppose, that he should be able, tho' with difficulty, to bear this shock, and that he should labour his ground for the ensuing crop with the same spirit as usual. If that year should also turn out to be a year of plenty, the savings of his former crop, together with the surplus produce of this crop, added to the necessity the farmer would be under to sell *at any rate*, would now reduce the price so very low, that he would be involved in still greater and more inevitable distress. His stock, instead of being profitably employed for producing more grain, and putting in motion a greater quantity of national industry,

* I here, and through the whole of this Postscript, adopt the general terms employed by Dr Smith, as I think they apply with peculiar propriety to the subject treated of.

would be locked up in attempting to preserve a perishable commodity, which no care nor expence could possibly preserve for any considerable length of time. And no man knows better than Dr Smith, what are the inconveniencies that result from thus locking up the productive stock of any community.

It does not, however, import our present argument, to point out these inconveniencies with a scrupulous minuteness. It is sufficient for our purpose here to observe, that in a few years of moderate abundance, the farmers in these circumstances would find themselves unable to follow their employment with profit, and would therefore be obliged, either to abandon it, or by a less-spirited culture to raise less grain, so as to enhance the price. Less corn, in either of these cases, would inevitably be produced; and thus the farmer, by insuring a scanty crop, would secure to himself a certain market, and a good price.

In consequence of this necessary system of conduct, scanty crops would no doubt be produced, even in favourable seasons; — but if, along with this artificial scarcity, it should so happen, that the seasons were also unfavourable, the deficiency would be so very great, that the small surplus savings of former years, diminished by the innumerable accidents to which these must ever be exposed, would afford but a very trifling supply, and would be very far from making up for the double deficiency that would arise from an unfavourable season and imperfect cultivation: and if we had already occasion to remark, that the price of grain was unreasonably lowered when a small proportion of it remained unsold, it will readily occur to every reader, that the price will be still more exorbitantly raised when the quantity of grain shall thus fall a little short of the demand there is for it.

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And if a second year of scarcity should succeed the first, as there would then be no surplus savings, the price would, if possible, be raised still higher, and the people be involved in greater distress.

If it should be alledged, that an unlimited freedom of importation and exportation of grain at all times, would in some measure alleviate these evils, by taking from the farmer his surplus produce in years of plenty, and by supplying the deficiencies of a scanty crop by an importation from other countries in years of scarcity, I readily allow, that it would produce these beneficial consequences *in some measure*, although in a much less perfect degree than would naturally result from a well-regulated bounty on grain. But if Dr Smith means to insinuate, that this unlimited freedom in the commerce of grain should be substituted instead of the bounty, and would be attended with those beneficial consequences he enumerates, it would seem that he has been guilty of a small inaccuracy of reasoning on this occasion, that deserves to be pointed out, as he recurs to it in several other parts of his book.

If a free commerce of corn should alleviate the distress of the farmer, by taking from him in years of plenty his surplus produce, and carrying it away to other places where it might be more needed at the time, it must follow, that, in this case, *the savings of former years of plenty*, being thus carried out of the country, could no more tend to moderate the price in times of scarcity, than if that superfluous produce had been carried away in consequence of the bounty; so that Dr Smith must either give up with the free commerce of grain, or strike off *the savings of former years* from his list of advantages which the country is deprived

ved of only by the bounty, seeing it would be equally deprived of it by his favourite system of a free commerce : and setting aside this article of the savings of former years, (an article besides in every possible state of things more imaginary than real), I presume it will be impossible to show, in what manner the bounty can have a tendency to raise the price of grain in years of scarcity. Considered, therefore, merely in this view, of its tending to keep the market-price of grain more steady than it otherwise would be, the bounty would seem to be highly beneficial to the state. — That this, however, is but *one* of the *many* benefits it procures, I shall have occasion to show in answering the following heavy charge brought by Dr Smith against the corn-laws and corn-merchants of England.

“ There is not” says he, “ perhaps but one set of men
“ in the whole commonwealth, to whom the bounty either
“ was or could be really serviceable. These were the corn-mer-
“ chants, the exporters and importers of corn. In years of plen-
“ ty, the bounty necessarily occasions a greater exportation than
“ would otherwise have taken place ; and by hindering *the plen-*
“ *ty of one year* from relieving *the scarcity of another*, it occasion-
“ ed in years of scarcity a greater importation than otherwise
“ would have been necessary. It increased the business of the
“ corn-merchant in both ; and in years of scarcity it not only en-
“ abled him to import a greater quantity, but to sell it at a bet-
“ ter price, and consequently with a greater profit, than he other-
“ wise could have made, *if the plenty of one year* had not been
“ more or less hindered from relieving *the scarcity of another*. It
“ is in this set of men accordingly that I have observed the great-
“ est zeal for the continuance or renewal of the bounty.” Vol. 2.

p. 99.

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Nothing can be more unjust and fallacious than the reasoning in this passage; and it rests on principles so diametrically opposite to those by which our author is usually guided, as can hardly fail to excite some degree of astonishment in the mind of the attentive reader: yet so firmly have these heterogeneous ideas taken possession of his mind, that he repeats the same sentiments again and again in various places of his book, and dwells upon them as if they were fundamental axioms of the highest importance, which could not be controverted. It becomes necessary in these circumstances to expose their fallacy.

No one who has read Dr Smith's performance can ever suppose he means to insinuate, that the exportation and importation of corn should be always prohibited; I shall therefore omit taking any notice of the consequences that would result from that arrangement.

But if exportation of corn is allowed of in years of plenty, and importation is not prohibited in years of scarcity, the corn-merchants would have at least *as much* business without the bounty as with it, and it would be in their power to have *much higher* profits: for if, in years of plenty, the quantity of grain should be more than sufficient to supply the home market, the price, it is evident, would sink so low as to enable the merchant to have a profit on exporting it, as well as at present. The exportation, I am indeed sensible, would in this case be soon very much diminished;—but neither the employment nor the profits of the merchant would be diminished by that circumstance. For

Nothing can be more certain, (and Dr Smith will readily allow it), than that the quantity of grain raised in any country, will
always

always be exactly proportioned to the ordinary and steady demand for it. When the quantity of grain produced shall exceed that ordinary demand, the farmer, finding no vent for it, will be obliged to abandon that unprofitable trade, and betake himself to some other, in which he can get more certain returns. If, on the contrary, the quantity produced should fall short of that demand, the price of grain would be raised so much by that circumstance, as to encrease the farmer's profit beyond that of other trades; which would tempt so many to go to that business, as would by their competition with one another soon reduce the profits on agriculture to the same general medium of profit as in other trades.

Now, if the farmers in Great Britain had only a demand for as much grain as the inhabitants of this island alone could annually consume, they would raise no more than was just sufficient for that purpose *in ordinary years*. But if, besides that, there were a certain and steady demand for a considerable quantity for exportation, *that* quantity also would be raised in ordinary years. But if the bounty were discontinued, there would be no certain and steady demand for exportation, so that no more grain would be reared in Britain in a year of scarcity, than would have been barely sufficient to have supported the inhabitants if it had been an ordinary crop; in which case the deficiency of that scanty crop would fall to be made up by an importation from other countries. In these circumstances, therefore, the corn-merchant would have abundant employment *in years of scarcity*; and as the inhabitants would be under the necessity of depending entirely upon him for their subsistence, he would have a better opportunity of enhancing the price, and of *grinding the faces* of the poor, than he can have according to the present system, as will by and by more clearly appear. For,

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On the other hand,—while the farmers continue to be employed in rearing corn for exportation as well as for the home market, in a year of scarcity, the quantity that was destined for exportation, comes to be naturally applied to make up the deficiency of that part of the crop which was originally destined for the home market; so that, instead of being obliged to import the whole of that deficiency from abroad, which otherwise must of necessity have been done, the inhabitants are supplied chiefly, perhaps entirely, with their own home produce; and are thus saved the whole amount of the price of freight, insurance, and merchants profits:—A saving of no trifling moment to them. And as the home market would be thus more abundantly supplied than it otherwise would have been, the inhabitants do not lie so much at the mercy of the corn-merchants, who are thus deprived of the possibility of demanding or of obtaining such extravagant profits as they otherwise could have easily exacted.

If, therefore, in the present system, the corn-merchants do really *export* more than they otherwise would do, they *import* less; so that they have nearly the same *quantum* of employment in the one case as in the other: but with this very important difference, that their profits are paid with infinitely greater ease to the subject, and benefit to the state, by the help of the bounty, than they could have been without it.

So far is the extraordinary exportation that may be occasioned by the bounty in years of plenty, from occasioning an extraordinary importation in years of scarcity, according to Dr Smith's hypothesis, that it produces an effect directly the reverse. For it will appear that the greater the quantity that is exported in years of plenty,

plenty, the quantity imported in years of scarcity will necessarily be small in proportion to it.

An example will make this plain to the meanest capacity.

Let us suppose, that the greatest variation, in the total amount of the crop between a year of the greatest plenty and one of the greatest scarcity, amounts to one fourth of the whole crop:

Let us again suppose, that the ordinary and constant export, did, in years of medium plenty, amount to one eighth of the whole produce, the farmer would in this case be in the constant practice of rearing one eighth more grain than supplied the inhabitants *in ordinary years*; so that when the crop, through the unfavourableness of the seasons, fell short of its ordinary quantity one eighth part, there would still be enough in the country to supply the internal demand; as the eighth part of it that was destined for exportation would exactly supply the deficiency. No importation, therefore, would be needed in this case.

But if the ordinary demand for exportation should have amounted to no more than one sixteenth; although, in the case above supposed, this sixteenth part which was allotted for exportation should be kept at home, there would still remain a deficiency of another sixteenth; to make up for which deficiency, recourse must be had to importation. Nor will it be possible to obtain it from abroad till the price in the home market shall rise to such a rate as to pay for freight, insurance, and merchants profits, to enable them to bring it from foreign countries.—It is plain, however, that if the deficiency of the crop had in this case amounted to no more than one sixteenth of the medium years, there

there would have been no occasion for any importation ; so that, according to this arrangement also, it would be but seldom that corn could be imported, and then in small quantities only.

But if, instead of one eighth, or one sixteenth, the usual quantity exported should have amounted to one fourth of the whole crop in ordinary years, it would follow, that in the greatest scarcity that could ever happen from bad seasons, there would still remain one eighth for exportation after the deficiency occasioned by the bad crop was fully supplied. According to this arrangement, the inhabitants would enjoy an universal abundance in spite of the greatest variation of seasons : nor could their markets ever experience any fluctuations of price but those that should depend on foreign markets ; which might be easily so regulated by the bounty as to be scarce ever felt.

So far, therefore, is an extraordinary exportation in years of plenty from giving the merchant importers extraordinary employment in years of scarcity, that if our ordinary exports were sufficiently abundant, they would annihilate entirely the business of the merchant importer : and the importation in years of scarcity must always be diminished exactly in the same proportion as the ordinary quantity of corn exported in years of plenty shall encrease.

It is equally true, that so far is the exportation occasioned by the bounty from hindering the plenty of one year from relieving the scarcity of another, as Dr Smith supposes, that it is perhaps the only method that can be devised for effecting that purpose with any degree of laudable œconomy.

As to the supposition that farmers would ever be induced to rear more grain than was necessary for supplying the demand in years of tolerable plenty, and that they should make a constant practice of retaining the surplus quantity in their own possession till a year of scarcity should come, I frankly own, that the idea of it appears to me so extravagantly absurd, when examined even with a slight degree of attention, that I should suspect I did not understand Dr Smith's meaning in the passages above quoted, and many others where he mentions the *surplus of one crop relieving the deficiencies of another*; yet if it is not this he means, I own myself at a loss to know what it is. If I am thus induced to give answers to an opinion that he never meant to maintain, I hope he will not attribute it to any desire of misrepresenting his arguments, but purely to misconception. It would have been well if he had expressed himself a little more clearly on this head. A few observations will suffice to shew the impracticability of such a plan as that above alluded to.

Were a year of plenty to be succeeded immediately by a year of scarcity, and were that scarcity to be foreseen beforehand, like that which happened to Joseph in Egypt, such a thing as this might sometimes be done. But should seven years of plenty be succeeded by seven years of scarcity, can any one imagine, that the surplus produce of the plentiful years would be accumulated to supply a scarcity that might never perhaps be experienced? The history of Joseph's dearth gives a sufficient answer to the question.—No:—the farmer has not granaries to preserve his grain,—he has not stock to carry on his ordinary operations without regular annual returns:—and Dr Smith himself will tell us, that he would not have power to protect it from the mob, in a country like ours, were he possessed of every other conveni-

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ence. Even if the internal dealer in corn should come, like Joseph, to the farmer's assistance, the immense accumulation of stock that would here be locked up, would deaden the general industry of the nation exceedingly, as all that stock must be withdrawn from some other productive employment.—The waste that would be sustained by attempting to preserve such a perishable commodity, and the risk the merchant would run of fire, of mobs, and of other disasters, would necessarily raise the price so much as could afford the merchant no sort of reasonable profit but in years of absolute famine, like that which heretofore enslaved Egypt. In short, let us view this undertaking in every possible light, and we shall find it so closely environed with difficulties on every side, as to show that it is altogether impracticable. Impracticable, however, as it is, it has been often attempted to be realised; and there are not wanting many instances of rich misers in every corner of the country, who have endeavoured to augment their stores, by refusing to sell their grain in ordinary years, and attempting to keep it till times of scarcity: but they have suffered so much for their temerity, as clearly demonstrates that such a plan can hardly be followed in any case with safety, far less with profit; and sufficiently authorises the wisdom of the general maxim, *That the farmer's best profit is the first*; and that it is always wise in him to take the current price of the year, however low that price may be. A prudent man, therefore, will have no savings of consequence, even in the most plentiful year: — a fool, if he attempts it, will not have them long. —

But, in consequence of the great exportation occasioned by the bounty, it has been showed, that a great surplus may be reared in plentiful years; which, instead of being preserved a dead and decaying stock, is immediately sent abroad. And in years of scarcity,

scarcity, the quantity which has been raised for succeeding that which was sent abroad, by being directly applied to the use of the inhabitants, supplies, with the most judicious œconomy, the deficiency of the home market. In this manner the farmer, by never finding that he can have too great a surplus produce in years of plenty, exerts himself as much as he can to raise more; and in this manner, and in this alone, can the surplus produce of a plentiful crop be made instrumental with the strictest œconomy in diminishing the deficiency of one that is more scanty. If this method had been adopted in Egypt, the *people* might have been all abundantly fed, and still have retained their freedom during the seven years of famine, instead of becoming slaves to the cruel policy of Joseph.

Thus it appears, that Dr Smith's reasoning, as to the particulars here investigated, is entirely fallacious; and that the conclusions he draws from every position, are not only erroneous, but even directly the reverse of what they ought to have been. I would therefore apply to the merchant importer and exporter of grain, the observations he makes upon the importance of the internal corn-merchant, as they are equally applicable to both: For in this enlarged sense I perfectly agree with him in thinking, that "after the business of the farmer, that of the corn-merchant is in reality the trade, which, if properly protected and encouraged, would contribute the most to the raising of corn. It would support the trade of the farmer in the same manner as the trade of the wholesale dealer supports the manufacturer." After what has been said, it is unnecessary to add, that he has been induced to make a distinction between these two classes of corn-merchants in consequence of pursuing a train of fallacious argumentation.

It is not, therefore, because the bounty upon corn has a tendency to encrease the price of grain, and thus apparently to enrich the proprietor and farmer, or because it encreases the business and profits of the merchant exporter and importer of corn, that I have bestowed such praises upon this system of legislation. No political system that should aim at giving one class of citizens an undue preference to other classes, could be justly entitled to any degree of praise from a well-informed member of the state. But it is because that at the same time that it has a natural tendency to moderate the price of grain upon the whole, it affords a constant market to the farmer, (which is the surest way of promoting alike the interests of agriculture and of national industry); but more especially, because it tends in the most direct manner to prevent the price of grain from ever rising to an extravagant rate, or falling to an unreasonable abasement, which I consider as a benefit of the highest and most general importance; as it more effectually promotes the general industry of all ranks of people, and thus augments the vigour and internal felicity of the state, than any other circumstance that could be named.

And that the bounty has a natural tendency to produce all these salutary effects, in a higher degree than would be produced by an unlimited freedom as to the commerce of grain; and, in particular, that it necessarily moderates the price of grain in years of scarcity, instead of raising it higher than it otherwise would be, as Dr Smith asserts, will appear to the reader, I hope, very plain, not only from what has been already said, but also from the following parallel between the consequences that would be the result of a free trade in corn, compared with that which is regulated by the bounty.

First,

First, Without the help of the bounty, no corn could ever have been exported till the price fell so low in our own market as to be the whole amount of freight, insurance, commission, and merchants profit, below the then selling price of grain in some foreign market to which it could be carried. In which case it must have been at *least* the whole amount of the bounty below the lowest price it can possibly ever fall to where that is allowed.

Secondly, There never could have been any corn imported till the price in Britain should have exceeded that in some foreign state from whence it could be brought, by the full amount of the freight, insurance, and merchants profits, for transporting it: which articles in time of war, or other disastrous occurrences, must have been on some occasions extremely high. Whereas it has been shewed, that were exportation duly encouraged by a well-regulated bounty, the home market would at all times be abundantly supplied, merely by detaining at home our own surplus produce in years of scarcity; and thus the whole freight and other charges be saved to the consumer; which alone would be an article of very great national advantage. But if it be likewise considered, that in consequence of this plenty at home, the market-price may not perhaps rise *nearly* to that height which would have admitted of importation, the national benefit procured by it will appear to be still more considerable.

Thirdly, Were we thus obliged to depend on foreign markets for a supply to our deficiencies in years of scarcity, instead of relying on our own surplus produce obtained by the aid of the bounty; in times of *general* scarcity in other countries (and such disasters do sometimes occur, from a very general failure of crop) we might be reduced to the greatest distress for want of food, and
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the price of grain be raised to the most extravagant height; as was frequently the case with our forefathers, to the utter ruin of all the poor in the kingdom. But,

Fourthly, We would in this case not only be in danger of suffering from the inclemency of seasons, but would be obliged to rely in some measure on the caprice of foreign nations for our daily bread. In consequence of wars, political alliances, or other unlooked-for circumstances that often influence the rulers of kingdoms, the only ports from which we could be supplied on a particular emergency, might be shut up from us, and we be obliged to suffer all the miseries of famine. Is it prudent in any nation which has it in its power to ward off such dreadful calamities, not to adopt that plan of conduct that would effect it, if it should even be attended with very great expence? But it is plain, that if by means of a well-regulated bounty, the general exportation of grain should ever become so considerable, as, in years of moderate plenty, always to exceed the greatest deficiency of crop that should ever be known to happen from unfavourable seasons, these very beneficial effects would be with certainty insured to Britain, and her inhabitants might remain in perfect security against the fear of dearth, much more against the fear of that most dreadful of all scourges, a famine.

Dr Smith asserts, that the price of grain regulates the price of every other commodity in a state; and although I may not be disposed to admit of this position in its full extent, yet upon his own principles it would seem to follow, that that state will be least liable to internal convulsions, where this universal regulator is permitted to vary as little as possible, and that he ought to have been happy at discovering an easy and effectual means of rendering that

that regulator as steady as the nature of things will admit of; especially if this corrector should likewise tend to make the price of that universal standard lower upon the whole than it could have been without it; (for however much I may be convinced, that an accidental depression of the price of grain below the medium price is always attended with hurtful consequences to the state; yet I presume we will both agree in thinking, that it is at all times an advantage to a state to have that general price of corn as low as the nature of things will properly admit of); and as the bounty on corn naturally tends to produce both of these good effects, we would have expected that it would have met with his approbation instead of censure. For although the bounty deprives the farmer of the profits he might reap by the great rise of price that would ensue in consequence of a scanty crop,—yet this small loss is much more than made up to him by the greater price he receives for his corn in years of plenty, and the certainty it gives him of a ready market for his grain at all times; which, however abundant, he is thus assured will never be allowed to remain unfold. He therefore goes on with spirit in his undertakings, and produces much more grain with the same expence of stock and labour than he otherwise could have done; and, like every other manufacturer in similar circumstances, can thus afford to sell his goods cheaper upon the whole than formerly, although he himself has perhaps better profit, and lives better, than he would have done in other circumstances.

Considered in this light, the bounty might with propriety be compared to a premium for insurance in any other hazardous undertaking. Agriculture is a trade necessarily subjected to very hazardous variations, owing to the unavoidable difference of seasons, and consequent encrease and decrease of crop, added to the
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very perishable nature of grain of all sorts. This very hazardous employment, however, must, from the nature of things, be carried on by a number of individuals, the mediocrity of whose capital stock renders them incapable of bearing these great fluctuations without the most sensible inconveniencies to themselves and families. Like every other hazardous employment, therefore, the profits must be upon the whole higher than in other less hazardous trades, otherwise it would be abandoned; and even with these high profits the risk and outlay is so great, as frequently to reduce those of moderate stock to beggary, whose ruin deranges the whole internal œconomy of the state. It is moderate profits in trade, and quick returns of stock, that most effectually contribute towards enriching the feller and accommodating the buyer; on both which accounts it would be highly beneficial to the state to devise a proper method of diminishing the risks of the farmer.

In similar circumstances with this, it has been found, that the community has derived very high advantages from insurances in every other branch of trade. By the help of this most useful invention of modern times, a man may safely venture his whole stock in the most hazardous undertaking, without the smallest risk of ruining his family. In consequence of this security, such hazardous trades are no longer abandoned to those in desperate circumstances, who in hopes of obtaining a lucky chance, venture their little all, and are ruined by its failure. They then come to be viewed as respectable employments, and are followed by men of knowledge and abilities, who by strenuous efforts strive to bring them to the utmost degree of perfection they are capable of attaining. The competition which this necessarily occasions between the numerous dealers who are thus induced to pursue these trades, soon reduces the profits upon them much lower than formerly.

merly. The market will be of course more abundantly supplied with that particular commodity in which they deal, and the price will be also more moderate than before. In every case, however, the buyers must at any rate pay the insurance-price;—and the only question that in this case remains to be determined is, Whether it will be more beneficial to the community at large to have this insurance-money advanced by some rich society, who find their profit upon such a trade; or if every individual shall still be left to bear his own private losses, and to indemnify himself for them in the best manner he can?—No man who is in the least acquainted with trade, will be at a loss to determine this question in favour of the public insurance.

But the bounty on grain gives the farmer that security he stood in need of, and is by consequence similar in its effects to an insurance-premium in every other hazardous branch of trade.

Or, if it should please another rather to consider the bounty on corn as a premium advanced by the community, for insurance against the loss they might sustain from a variation of seasons, the reasoning would be equally just, and would only differ from the former in the terms.

For in whatever manner it may be advanced, it will not admit of a doubt, that the community must pay in one way or other more money for an equal quantity of grain, the produce of a scanty crop, than of one that is more abundant, not only to make up to the grower the lack he feels in the quantity, but also to make up for the loss he sustained by the unreasonable lowness of price in a year of too much plenty. If the farmer is left to himself, and this deficiency of crop comes to be supplied by

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importation, the consumers must, in the first place, pay a high premium to the farmer in the great advance on the price of grain, which must be at least so high, as to be the whole price of freight, merchants profits, &c. above some foreign accessible market at the time, and then another premium to the merchant-importer, to enable him to bring it from abroad. In this case the premium given to the farmer alone, must be altogether sufficient to indemnify *him* for his deficiency of crop and former losses, otherwise he cannot continue his employment; but besides this, there still remains to be paid another premium to the merchant-importer, which is entirely a superfluous expence to the state, as it has already paid the farmer his full insurance-profit: and what aggravates the misfortune in this case is, that both of these high premiums come to be paid at once entirely by the lower orders of the people; so that this is the most destructive method of levying it that could possibly be invented.

By contriving, however, to pay the farmer for the loss he might sustain in a year of plenty from the disproportionate lowness of price, or, in other words, by granting the bounty, they enable him to dispense with the extraordinary price he would have been obliged to exact in years of scarcity, and, by tempting him to rear as much grain as possible, they put it in his power to apply a part, or the whole, of his ordinary surplus produce to the use of the home market, instead of sending it abroad, as it was originally intended. In this manner the market is kept low; and the inhabitants are at this time saved, not only the farmer's extraordinary premium, but also the high charge of freight and merchants profits on importation, which they would otherwise have been obliged to advance. In this case also the premium is paid, viz. by the advance of the bounty-money, and the rise of price

price which that occasions in plentiful years; but it is paid in such a manner as not to be sensibly burdensome to the state.

Where such a political arrangement takes place, the community at large may be said to become the insurer of every individual against the inconvenience that may arise from unfavourable seasons and a scanty crop. Like the Edinburgh Friendly Insurance company, the whole society become bound to make up the loss that shall be sustained by any individual among them from fire; which enables every one of its members to live in perfect security at all times, instead of running the risk of being totally ruined by any unforeseen accident.

And as it is not in the power of man entirely to prevent accidental fires in the one case, or accidental bad seasons in the other; so in neither case is it possible to prevent entirely the loss that may thus be sustained by those individuals that may be most exposed to danger. It ought, however, to be the study of the politician, to make these unavoidable losses be as little hurtful to the state as possible; which can be in no manner so well effected as by making that loss be borne by the community at large, as equally as possible, instead of allowing it to continue to rest entirely upon the individuals on whom the principal loss should first fall.

The bounty on corn is even perhaps more highly beneficial than the insurance on any other hazardous stock; because, in most other cases, it is those who have most property that are most exposed to danger; whereas here it is the poor, and those who have least to lose, who are the principal, and almost only sufferers, when danger comes: but as the bounty is paid out of the aggregate funds of the whole community, the rich members of the state

contribute their proportion of the premium ; which insures the poor a certainty of enjoying the necessaries of life at all times at a moderate price.

The bounty has a natural tendency to over-rule even the influence of bad seasons themselves, and prevent them from varying the total amount of the crop so much as they otherwise would do : for as it gives the farmer perfect security, and enables him to apply his whole capital to the improvement of his trade, it necessarily occasions a more perfect culture of the soil ; and every sensible farmer knows, that a rich soil in a high degree of cultivation, is far less liable to be affected by a variation of seasons, than one that is in worse order at the time. Like a man of a robust temperament and healthy constitution, who can bear, without any sensible inconvenience, such great variations as to diet, air, exercise, &c. as would totally destroy a man of a weakly habit, the produce of an improved soil will hardly be in the least affected by a variation of season, that would entirely destroy the crop of one that was in a poor and exhausted condition. In this manner the inconveniencies of bad seasons come to be less sensibly felt, and the consequent necessity of high prices proportionally abated.

The corn-laws of England, therefore, as tending to produce all these beneficial effects, I think we need not hesitate to call extremely wise : and although it should be allowed, that in some respects they are much less perfect than they might be, we ought not to endeavour to vilify them, and cause them be rejected on account of these defects ; but rather endeavour to point out such defects as need to be corrected, so as to improve them more and more, and render them still more beneficial to posterity than they have

have been to ourselves. With this view I shall suggest the following hints, relating to the corn-laws, to the consideration of the judicious reader.

It would seem reasonable, that instead of one invariable bounty to be paid upon the exportation of grain equally at all times, when the grain in our home market was below one specified price, it would be more equitable, and better adapted to the end in view, (the preventing as much as possible all variations in the price of grain in the home market), to make the bounty vary with the price of grain in the home market, so as that it should encrease as the price of grain decreased.

With the same intention it would be proper, not only to permit the importation of corn when the price at home exceeded a certain rate, but even to give a premium on importation when it should rise above another limited price; and which premium should also encrease as the price in the home market encreased.

Let us, for example, suppose, that the price of wheat fluctuated between 30 shillings and 60 shillings per quarter, and that it was intended never to allow it to come to either of these prices,—the premium might vary in some measure, as in the following table.

When

When the price of wheat per quarter should be at		the bounty on exportation should be per quarter
s.		s.
30 or under,	-	10
34 -	-	8
38 -	-	6
42 - -	-	4
44 -	-	2
46 - -	-	1
48	Exportation to cease, and importation be allowed of.	
50 -	-	1 premium on importation.
52 - -	-	2
54 -	-	4
56 - -	-	6
58 -	-	8
60 and all above that price	10	

I do not pretend to determine, whether or not the rates in the above table are the best that could be chosen. All I mean to insinuate is, that a system of corn-laws founded on these principles, if rightly digested, would probably lay the best foundation possible for a steady and settled market for grain at a moderate price. Nor would there be given, according to this system, any undue preference, either to the farmer on the one hand, or to the other classes of people on the other hand; as an equal provision would be made for moderating the price when too high, as for raising them when too low. Perhaps the greatest inconvenience attending it would be the trouble of settling the prices so as to regulate the bounty or premium; but this might be done by the sheriffs for their respective counties, at regular periods, as is practised

tified at present in some cases in Scotland.— This particular will be more fully explained in the sequel.

By such a system, agriculture would be more effectually encouraged than by the corn-laws at present in force in England, without paying a greater sum for the bounty. For as the premium would be greatest when the prices were low, there would be on these occasions a sudden demand for exportation, which would quickly raise the price, and lower the bounty with it; which would soon bring it to the ordinary selling-price of grain at present; in which case the bounty would be less than our law just now allows of: so that the farmer would be more certain of a reasonable price, and the manufacturer more effectually secured against the possibility of a dearth, than at present. By this steady encouragement to the farmer, it is probable the exportation would increase so much, as in time totally to prevent the necessity of any importation at all. The present corn-laws in England have even already effected this in a great degree.

Others before me have been convinced of the beneficial effects of the bounty; and, not satisfied with reasoning alone, have had recourse to facts in confirmation of their reasoning; alledging, that notwithstanding the great decrease in the value of money since this system of legislation has been adopted, and the consequent increase in the price of almost every other article in England; yet grain continues a singular exception to that general rule; as its price has decreased instead of increasing since that period, and consequently its *real* value is just now much lower than it was before the bounty was allowed of; which they have, with seeming justice, attributed in a great measure to the operation of the corn-laws.

This

This fact is admitted by all parties; but, in granting the fact, Dr Smith affirms, "that this event," (viz. the fall of the average price of corn since the bounty), "supposing it to be as real as I believe it to be, must have happened *in spite of the bounty*, and "cannot possibly have happened *in consequence of it* *."

In a matter of so much moment, we cannot help regretting that Dr Smith should have contented himself with the bare assertion, instead of farther proof. But as the fact so exactly corresponds with the conclusion that reasoning would have induced us to expect, it gives to that reasoning so much additional weight, as to entitle it at least to a serious refutation. Had the fact indeed been relied upon as the only proof in its favour, I would have thought there was reason to suspect it might have been occasioned by some other circumstance not attended to; — but when reasoning and facts thus mutually corroborate one another, no man of sound understanding will think, that a bold assertion, or flippant remark †, will be accepted of as a proof of their fallacy. That other circumstances have co-operated with the bounty in producing this effect, I am ready enough to allow; — but it appears to me at least, that it yet remains to be proved, that this event has happened, not in consequence, but *in spite of the bounty*.

I may likewise be permitted here to observe, that if it shall appear certain, that the bounty has a necessary tendency to lower the price of corn in years of scarcity, instead of raising it, as Dr Smith alledges, all the reasoning that he produces, to shew the hurtful consequences that would result from the supposed rise of

* Vol. 2. p. 92.

† See Dr Smith, vol. 2. p. 128.

price that he imagines is occasioned by the bounty, falls of itself to the ground, without requiring any answer.

His reasoning, likewise, in the parallel drawn by him between the English corn-laws, and the laws of Spain and Portugal with regard to the commerce of gold and silver, seems to be liable to as great objections as the other particulars above specified. The exceeding perishable nature of the one commodity, and the great durability of the other, establishes alone a natural distinction between them, that it is impossible for any political institution ever to destroy. If, to pursue his own simile, the one may be dammed up so as to be made to spread over the surface of a large extent of country, and produce an extensive permanent lake that is subject to no abatement, the other would be of such a subtle or volatile nature as to sink through the soil, or be evaporated by the sun, before it could have covered the half of the bottom of the basin, so as to be incapable of producing even a temporary lake of great extent.—If, with Dr Smith, the mines of precious metals may be compared to a never-failing spring, that by continuing to flow out with an equal current, will soon deluge any country into which it should be permitted to enter, and from which it could not issue with freedom, till at last it should rise above the barriers that had been erected to confine it, however high the dam might be, and would then flow over it just as fast as it should come in, — the production of grain may be with equal justice compared to the milk yielded by a cow, which, if not taken from her regularly as it is produced, will soon decrease in quantity, so as in a short time to dry up entirely, unless it is drawn from her at regular and short intervals, however rich and abundant her pasture may be.

Dr Smith himself seems to have been fully sensible of the justness of this reasoning, when he observes before he quits the subject entirely, that “the trade of the merchant exporter of corn
 “ for foreign consumption, certainly does not contribute *directly*
 “ to the plentiful supply of the home market. It does so, however, *indirectly*. From whatever source this supply may be
 “ usually drawn, whether from home growth, or from foreign
 “ importation, unless more corn is usually grown, or usually imported into the country, than what is usually consumed in it,
 “ the supply of the home market can never be very plentiful.
 “ But, *unless the surplus can, in all ordinary cases, be exported*, the
 “ growers will be careful never to grow more, and the importers
 “ never to import more, than what the bare consumption of the
 “ home market requires. *That market will seldom be over-stocked;*
 “ *but it will generally be under-stocked*, the people whose business
 “ it is to supply it being generally afraid lest their goods should
 “ be left upon their hands *.”

But if the market would *in all ordinary cases* be under-stocked, would not the price of grain be *in all ordinary cases* enhanced by that circumstance? — It has, however, been already shown, that grain *in ordinary cases* could not admit of being exported, at least from Britain, unless it were for the bounty. It must, therefore, according to Dr Smith’s own reasoning, tend in the most effectual manner to supply the home market abundantly at all times, and consequently to moderate the price.

It may perhaps be admitted as a general rule, That an unlimited freedom of commerce, without either encouragement or

* Vol. 2. p. 123.

restraint,

restraint, is the conduct that would be most highly beneficial to the state; and that it would be an advantage to the country in general, that those branches of commerce which cannot go on without aids of any sort, should be abandoned as unprofitable. But the rule will admit of many exceptions, and perhaps in no case more than in what relates to the commerce of grain. Other articles of commerce can usually be dispensed with whenever their price becomes too high, without materially affecting the well-being of the inhabitants in general, so that it is a matter of comparatively small importance whether they abound or are scanty. But this is far from being the case with grain. It is indispensably necessary, that the inhabitants should be at all times provided with it in abundance: for it cannot be wanted for one day. In case of a scarcity of this commodity, therefore, it is more liable to an excessive rise of price than any other commodity; and this excessive rise of price is attended with infinitely more fatal consequences than a rise in the price of any other commodity*. In other articles we trade merely for pleasure, or profit; — in this we trade from necessity. It therefore becomes necessary to judge in a different manner as to this branch of trade from what we might do as to any other.

I might perhaps here close my remarks upon this subject of the bounty on grain. — But as Dr Smith returns to it often, and throws out various other observations on the commerce of grain, I shall hope to be excused, if I endeavour to follow him a little farther. Detached hints as coming from *him* may sometimes have effects that he was not aware of at the time he made them.

* The reader is desired here to recollect the dreadful consequences that resulted from this cause in the province of Bengal in the year 1772.

By what mode of reasoning Dr Smith satisfied himself, that
 “ the bounty upon the exportation of corn can in no respect pro-
 “ mote the raising of that particular commodity of which it was
 “ meant to encourage the production *,” it is difficult for me to
 perceive. But if he once came to be convinced of this as a fact,
 it was natural enough in him to refuse to admit the bounty on
 corn among the class of bounties *on production*; and to ascribe to
 it effects altogether different from those which result from that
 particular class of bounties. But if I have succeeded in proving
 that the bounty on exportation has the most direct tendency to
 encrease the quantity of corn *produced* in the country, the reader
 will, I hope, be satisfied, that it is in the strictest sense of the word
 a bounty on *production*, and is therefore entitled to the same de-
 gree of applause as other bounties of this class.

Neither can the bounty be considered as a prop given to one of
 those unprofitable manufactures that cannot be supported with-
 out more money than could ever be returned to the nation by it,
 as he supposes †. The corn-trade is one of those that can never
 cease without producing the most dreadful disasters to the coun-
 try; so that it must go on alike with or without the bounty;
 with this only difference, that without the bounty the nation
 would export very little, and import a very great deal, whereas
 by the assistance of it, the case is directly the reverse, as the ex-
 ports will always greatly overbalance the imports. In the first
 case it is plain, that the national stock would be diminished by
 the whole price of that which was paid for the corn imported;
 and in the last case it would gain the whole amount of what it

* See Vol. 2. p. 102.

† Vol. 2. p. 92. and 102.

drew from foreign nations as the price of corn exported. The society at large, therefore, must be gainers by the bounty. The bounty, in fact, costs the community nothing; nor does it take any thing from the pockets of individuals, but the reverse. The farmer must at any rate be paid for his labour, &c. or give up his employment; so that if he should lose by the low price in years of plenty, he must be again indemnified for that by a higher price in times of scarcity. If, therefore, the consumers advance a small part of the price to the farmer in years of plenty, he repays it with abundant interest in times of scarcity, by a diminution of the price at that time. The bounty considered in this view, is exactly similar to the money that should be advanced to a poor manufacturer by his employer when he begins the work; as the manufacturer, by receiving a small part of the price before the work is finished, is thereby enabled to afford it upon the whole much cheaper than if he had been obliged to borrow money from another at an extravagant interest, to supply his necessities in the mean time; in which case, although the employer gives at one time money apparently for nothing, yet in the end that becomes a real saving to himself, as it comes at another time to be received as a part of the price of his goods. If the consumers of grain did not advance this small bounty to the farmer, they would be under the necessity of paying a much higher one not only to himself, at another time, but also to foreign nations in years of scarcity; so that instead of being a loss, it is a great saving to the society at large, and must in its consequences be attended with very great benefit to the consumers of grain themselves.

I would not here take any farther notice of the position of Dr Smith, That "corn is the regulating commodity by which the
" real

“ real value of all other commodities must be finally measured
 “ and determined *,” were it not for the consequences he afterwards deduces from this, supposing it real and undeniable. It is not, however, strictly just; as the proportion of this regulating influence of corn may be varied by many circumstances that ought to have been attended to.

I presume it will be allowed, that the price of corn can only affect the price of labour in so far as that corn is in all cases a necessary and indispensable article of the labourer's subsistence. If this is allowed, it could then only be said absolutely to regulate the price of labour, if what a man eats should constitute the whole expences of his family. This, however, is, in no state of society, the *whole* of his necessary expences. In many cases it constitutes but a very inconsiderable part of them; as the conveniencies, and even the luxuries of life, in an advanced state of society, come in time to be accounted necessities; and on these occasions must affect the price of labour, as well as the price of grain affects it.

Lodging and clothing are in all cases necessary expences; and by consequence the price of labour must be affected by a variation in the rate of house-rent, — in the sumptuousness of houses, elegance of furniture, &c: that fashion may have made necessary in any one place for persons of a certain rank. — The price of cloth, — linen, — leather, — ribbons, — buckles, — buttons, — pins, and all the other numerous articles of clothing must in the same manner affect the price of the labour of those who use any of them. — In like manner, soap for cleaning, — fuel for warming, and oil or candles for affording light, are necessities, and

* Vol. 2. p. 101.

must affect the price of labour: to which must be added those luxuries that fashion may have rendered necessities; as tea,—sugar,—tobacco,—snuff, &c.; together with the local taxes, such as poors-rate,—stent and burden* in towns, and every other particular that can constitute a part of the expence of a labourer or his family, in that way that these labourers may be accustomed to live in any country.

But if all these articles are summed up on one side, and the single article of corn and other rude products of the fields on the other, it will be found, that unless in the very poorest families, these other extraneous articles bear a very considerable proportion to the whole annual expence of a family †.

I am aware it will be here replied, That although it be granted, that every labourer must give out a considerable proportion of his earnings for other articles, besides for food, the produce of his native fields; yet as these articles are for the most part manufactured by other labourers, who will be able to sell them in proportion to the price of the grain on which they live, this brings

* Names of particular taxes levied by the authority of the magistrates of towns in Scotland.

† Dr Smith himself seems to allow this, when he says, (p. 484. vol. 2.), “A tax upon those articles, (that is, on the necessities of life), necessarily raises their price somewhat higher than the amount of the tax; because the dealer, who advances the tax, must generally get it back with profit. Such a tax must therefore occasion a rise in the wages of labour, proportionable to this rise of price.”——“Taxes upon necessities, (p. ib. 486.), by raising the wages of labour, necessarily tend to raise the price of all manufactures, and consequently to diminish the extent of their sale and consumption.”——“The price of fuel has so important an influence upon that of labour, that, all over Great Britain, manufactures have confined themselves principally to the coal-countries.” p. 448.

it

it back again to the price of grain, which thus equally regulates the price of manufactures as of labour.—I answer, That there are many particulars that require to be examined before this reasoning can be admitted as conclusive.

In the first place, It must suppose that all the labourers who manufactured the articles which are needed by the first-named labourer, have lived entirely upon grain, or other produce of his native fields. For if they have consumed any part of the produce of other fields, the price of these articles may affect the price of the manufactures, as well as the corn of the country affected them.

In the second place, These manufactures must have been all worked up from materials the produce of his own country; otherwise the price of these rude materials, which cannot be in the least affected by the price of corn at home, must affect the price of the manufactured goods.

In the third place, Even supposing all the rude materials had been the produce of the particular spot in question, they must have been afforded to the manufacturer at the same price they yielded to the first rearer; as in any other case the price of the manufactured goods must be affected by that artificial price of the raw materials which does not return to the soil. Hence there must be no taxes on any of the rude products of that country; as these will necessarily affect the price of the manufactures in proportion to their amount.

In the fourth place, There must be no tax either national or local, levied from any of the particular manufacturers; as these taxes must necessarily tend in so far to affect the price of his labour, without

without having any necessary dependence on the price of the corn he shall have consumed. But,

In the fifth place, It must be a rule without any exception, That none of the manufactures used in the country, nor any other articles consumed in it, have been brought from any other part of the world; for it is certain, that the value of every such manufacture does not depend in the least upon the price of the corn in the country to which it may be transported.

But as it may happen, that a country shall receive many of its materials for building from abroad;—as it may be altogether, or in part, clothed with manufactures brought from a distance;—as it may also happen, that the inhabitants shall consume many articles of food, and other *necessary luxuries*, that come from afar;—as the natural rude products of the country itself may be taxed by the state, so as very much to enhance their price, and raise its own internal manufactures to a very great height;—and as local taxes on industry may be imposed, which will raise the price of these manufactures still higher,—there can be no doubt but that the price of labour may be greatly varied in different places, altogether independent of the price of grain.

There is in fact no kingdom in Europe in which the price of labour is not more or less affected by all of these articles, as well as by the price of corn. In every country the greatest part of the rude products of the soil are more or less taxed by the state before they can reach the consumer;—in every country local or general taxes are levied from particular manufactures;—some part of the rude materials that are manufactured in every European state are brought from a distance;—in every district many of the

most important manufactures consumed there, are brought from some other distant country;—and in all places the inhabitants consume some *necessary superfluities* that come from distant regions: In no place, therefore, is the price of labour or of manufactures *entirely* regulated by the price of grain in that place.

In some cases the price of grain has but a very slender influence on the price of labour, as that on some occasions constitutes but a small part of the annual expence of the labourer's family. For

If it should so happen, that a particular country had no manufactures * of its own, and if the inhabitants should sell nothing but corn, or other rude products of the soil, and should depend on distant countries for all their articles of cloathing, luxuries in eating, and every other kind of manufacture; it is plain that all these manufactures taken in the aggregate, enhanced by the heavy charge of freight, insurance, &c. would bear such an overproportion to their food, (which in that case must necessarily be supposed to be abundant), as would have a much greater influence on the price of labour than the price of grain would have;—especially if these people, from the favourableness of their soil and climate, should be able to sell so much grain, or other rude produce of the soil, at a low price, as to enable them to cloath themselves well, and to purchase the other elegancies, conveniences, and superfluities of life.—This, it is well known, is actually the case at present with some of the British colonies in A-

* The term *manufactures* is here employed in its vulgar acceptation, as excluding agriculture.

merica, where the price of labour is very high, although the price of grain is extremely low *.

Similar effects may be, and actually *are*, in some measure, experienced in Europe, from causes in some measure resembling the above.

Let us suppose there is a particular country where few of the common manufactures for cloathing, or others of as indispensable use, are carried on, and where the inhabitants are supplied with these necessary articles from other countries; the price of corn, and the other rude produce of the fields, may be here extremely low, and manufactures of all sorts, and taxes of every kind, so very high, as to force these necessary articles to bear a very high proportion in the ordinary expences of a family, to that of bread-corn: In this case it would be these extraneous articles, and not the price of grain, that would chiefly regulate the price of labour in that country.

This is in some measure the case with most of the distant counties in Scotland, where few manufactures of common useful necessaries have been established, in which places the price of labour is very high in proportion to the average-prices of grain.

It is easy for us to figure to ourselves another case, in which

* I am sensible that other circumstances concur to heighten the price of labour in America. But it is evident, a case similar to that mentioned in the text, would produce the effects there mentioned without any of these; so that if the price of labour is affected by any other peculiarities, these would form other exceptions to the general rule of Dr Smith.

corn might continue to be very low-priced, without producing a proportional lowness in the rate of labour.

If, while the rude produce of the country, or those articles that were necessary for carrying on those manufactures of indispensable necessity, were highly taxed; and, notwithstanding these drawbacks, the inhabitants, instead of importing them from abroad, should be in the practice of manufacturing them at home, although still strangers to all those numerous inventions for abridging labour, and simplifying the severe operations of the artisan, by dividing the several operations into distinct parts, and allotting to each labourer his own particular task, and thus making them all co-operate with one another in producing a much more perfect whole, and at a much smaller expence, than any one of them could have singly effected;—their manufactures would not only be rude in fashion, but also intrinsically of smaller value, although at the same time they could not be afforded to the buyer but at a higher price. In these circumstances, all the manufactures needed in a family must be higher than the proportional price of the grain would seem to require; so that this part of family-expences would bear a much higher proportion to that of its food, than in other countries, where manufactures were carried on in a more perfect manner.

In countries, too, that are thinly peopled, where buyers are few, and market-places at a great distance from one another, the very expence of going to fetch the articles necessary for a family, becomes a heavy tax upon the inhabitants: and the difficulty he finds in procuring the things he may have use for when he needs them, puts the householder to the necessity of buying at one time what he may not have use for till some time afterwards; which,
in

in perishable commodities, is always attended with loss; and, in other cases, it occasions an inconvenient outlay of stock, which is attended with no small hardship to a poor man: and if to this be added the incomplete assortment of goods that can be found in the shops, which compels the inhabitant to buy, not the very thing he needs, but that only which approaches towards it, although perhaps it shall be both more expensive, and much less proper for the purpose he wants; and if it be likewise considered, that as the retailers in these circumstances cannot have a quick sale, they are obliged to exact, and, having few competitors, are enabled to obtain a much greater profit upon the articles in which they deal, than they could have got in a more populous district; it must follow, that the inhabitants so situated will be obliged to pay much above their natural value for all necessary articles, grain only excepted; so that these necessaries, rather than the price of grain, will regulate the price of labour.

It is on account of these little circumstances, so often overlooked by politicians and men of high rank, although so sensibly felt by those in lower spheres of life, that it is universally found, that the expence of housekeeping is much higher in distant corners of the country, where industry has not yet taken firm footing, and where the price of grain, and other rude produce of the soil, continues very low, than a superficial observer would at first sight expect to find it:—and it is on account of the vast convenience that manufacturers find, from having access at all times to a good market, where they can get a perfect assortment of all things they want;—and the very great saving that accrues to them by being able to find the exact thing that suits the purpose they want in the most perfect manner,—where they can buy even a single nail of the particular size and shape that suits them, without being obliged

to

to purchase the smallest superfluity, that it is found a labourer will often live more comfortably, and be able to afford his work a good deal cheaper, in a populous thriving place, than in one that is poor, and thinly inhabited, although the price of grain, and all the rude produce of the soil, shall be much cheaper in the last place than in the first. It is chiefly on this account that manufactures are in general cheaper in Holland than in most countries of Europe, notwithstanding the very high taxes that are laid upon almost every article of life, and the very high price of all kinds of food in that country.

The low price of grain, therefore, will not necessarily ensure cheapness of labour in any country ; — it is the invigorating spirit of industry alone that can ensure that blessing in any situation whatever.

I have been at pains to develope the above circumstances more fully than perhaps would have been strictly necessary for illustrating our general argument, — with a particular view to make this circumstance be attended to by any of those public-spirited men who may attempt at present to establish any extensive manufacture in any remote corner of the country.

It deserves likewise to be remarked, that although the apparent price of labour is usually lower in poor countries, where the produce of the soil, and grain in general, is cheap ; yet it is in fact for the most part *really* higher than in other countries. For it is not the wages that is given to a labourer per day that constitutes the *real* price of labour, although it is its *apparent* price. The *real* price is that which a certain quantity of work performed actually costs the employer ; and considered in this light, labour is in

in almost all cases cheaper in rich countries than in those that are poorer, although the price of grain, and other provisions, is usually much lower in the last than in the first. Mr Smeaton, in giving in his estimate of the expence of making the canal from Carron to Dunbarton, subjoins a note to the following effect: — That although the above estimate is what the same quantity of work could be performed for in England; — yet, from whatever cause it might arise, he thought it necessary to observe, that he had always found it required (I think) about a fourth part more money to execute the same quantity of labour in Scotland, so that an allowance ought to be made on that account. It is well known, however, that labour estimated by *the day*, is much lower in Scotland than in England; and that grain, and other rude produce of the field, is also cheaper. But Mr Smeaton's experience has taught him, that labour *by the piece* is in general cheaper in England. My own experience corroborates that of Mr Smeaton: for where I now live, the wages of a labourer per day is about a fourth lower than where I first practised farming; but the price of any piece of work is in general between one fourth and one third higher.

I must, therefore, again repeat it, that the low price of grain does not necessarily ensure cheapness of labour; for in all those cases where a habit of industry has not been fully established, the price of labour must needs be very high in proportion to the average-prices of grain.

This may often be the case, even where manufactures are established, and carried on in a flourishing way. For if the inhabitants, instead of applying themselves to the manufacturing such things as are of daily use for themselves and families, should be
busily

busily engaged in working up foreign materials into manufactures for distant markets, it would follow, that all these manufacturers would themselves depend on distant countries for the ordinary supply of cloathing, which they would be unable to purchase with the money they earned by their own labour; and if the merchants found they had great profits by selling these manufactures in distant markets, they would naturally overbid one another, so as to raise the price of labour; and if the price of labour was much augmented, the people employed upon these manufactures would have much money to be employed in purchasing foreign luxuries, which would in time come to be necessaries almost as much as grain itself. In these circumstances, it is plain the price of grain could have but a very small influence in regulating the price of labour, or in influencing the profits of the manufactures, as this would constitute but a very small part of their ordinary expences.

On the contrary, it is sufficiently evident, that the price of manufactures must necessarily influence, and even in some measure regulate, the price of grain, in a situation similar to the above. For if the grain should continue as low as before these manufactures were established, the farmer would find his profit so inconsiderable in proportion to that of the manufacturing labourer, as to be induced to desert that employment, and by an imperfect or less general culture, raise the price of corn, till he should reap a profit from agriculture in some measure proportioned to that obtained in other trades. This I have already had occasion to observe is in a great measure the present state of Aberdeenshire; and a bad arrangement it is.

That the price of manufactures, and the rate of mercantile
I profit,

profit, must in all cases influence in a certain degree the price of grain, instead of being entirely regulated by it, seems to be tacitly allowed by Dr Smith, when he admits, that the money-price of grain must be affected by the general decrease in the value of silver that has taken place in Europe in consequence of the discovery of America. For if this shall be admitted, it must be granted, that this extraordinary influx of money that comes into any country, and thus degrades the value of specie there, can only find its way thither in return for the manufactures * sent abroad to those countries where the money more abounds; which manufactures, by procuring in return to the merchant a greater quantity of silver than formerly, enables him in his turn to encrease the wages of the manufacturer; in consequence of which extraordinary prices, some part of the ordinary labour will be turned from agriculture towards manufactures, till the price of grain shall gradually rise so as to afford the farmer a reasonable profit.

I conceive it impossible to show in what other way the price of grain can be affected by the decrease in the value of silver.— But in this case it cannot be denied, that the price of grain, instead of regulating the rate of labour, and price of manufactures, has been regulated by these. It seems to me, that they mutually influence and regulate one another: for if the profits in any trade are, from accidental circumstances, greater than another, a quantity of stock and labour will be withdrawn from the one, and

* The money might be brought into the country also in exchange for the rude produce of the soil alone; — but as this has never happened in any European country, except perhaps Poland, I have entirely omitted it in the text, to avoid unnecessary distinctions.

applied to the other, till the balance is restored to its proper equilibrium.

These positions appear to me so very plain and self-evident, and at the same time are so incompatible with the idea that Dr Smith's reasoning about the regulating influence of corn, and the other consequences he deduces from it, as well as to several passages in other parts of his work, that I am under some apprehension that I do not fully comprehend his meaning on this head: but as others may be equally at a loss with myself, and as his reasoning seems to lead to false conclusions, others, as well as I, may draw these conclusions from his doctrine until it is more clearly explained; which will, I hope, be a sufficient excuse for my here explaining what are my own doubts.

Dr Smith runs a parallel between manufactures and corn in the following terms. " When, either by the monopoly of the
" home market, or a bounty upon exportation, you enable our
" woollen or linen manufacturers to sell their goods for some-
" what a better price than they otherwise could get for them,
" you raise, not only the *nominal*, but the *real* price of those
" goods. You render them equal to a greater quantity of labour
" and subsistence; you encrease, not only the nominal, but the
" real profit, the real wealth and revenue of those manufacturers,
" and you enable them either to live better themselves, or to em-
" ploy a greater quantity of labour in those particular manu-
" factures. You really encourage those manufactures, and di-
" rect towards them a greater quantity of the industry of the
" country, than what would probably go to them of its own
" accord. But when, by the like institutions, you raise the
" *nominal* or *money* price of corn, you do not raise its *real* value;
" you

“ you do not encrease the real wealth, the real revenue either of
“ our farmers or country-gentlemen ; you do not encourage the
“ growth of corn, because you do not enable them to maintain
“ and employ more labourers in raising it. The nature of things
“ has stamped upon corn a real value which no human institution
“ can alter. No bounty upon exportation, no monopoly of the
“ home market, can raise it ; the freest competition cannot lower
“ it. *Through the world in general, that value is equal to the*
“ *quantity of labour which it can maintain ;* and in every particular
“ place it is equal to the quantity of labour which it can main-
“ tain in the way, whether liberal, moderate, or scanty, in
“ which labour is commonly maintained in that place. Woollen
“ or linen cloth are not the regulating commodities by which the
“ value of all other commodities must be finally measured and
“ determined, corn is. The real value of every other commodi-
“ ty is finally measured and determined by the proportion which
“ its average money-price bears to the average money-price of
“ corn *.”

I frankly acknowledge, that after having bestowed all the at-
tention I am able upon the above passage, I cannot clearly per-
ceive what it means. At first view it seems to indicate some my-
sterious immutability in the nature of the value of corn which is
peculiar to itself, and therefore sets at defiance all attempts that
may be made to alter that value.— But upon a nearer exami-
nation, it seems impossible to admit of this meaning. Let us en-
deavour to develope our ideas on this head.

The real value of any commodity in a civilized and commer-

* p. 100.

cial state, when speaking in a commercial style, free from all metaphysical subtilty, I understand to be, the quantity of the necessities or superfluities of life, or, if you will, the quantity of subsistence, which that particular commodity is able to procure to the person who possesses it. But in commercial countries, where all commodities are readily exchanged for money, the quantity of that universal medium that can be obtained for any particular commodity will indicate exactly its real value to the possessor: for it will not be denied, that the more money he can draw for it, the more subsistence it will enable him to purchase with it. In common language, therefore, and seemingly with strict propriety, the quantity of money any commodity can procure, is called its price; and its real value is estimated by the amount of that price.

This, however, it would appear, cannot be the *real value* of corn mentioned in the above passage, which *no human institution can alter*, &c.—For in this sense it is plain, that the *real value* of corn may be altered by a thousand different circumstances*.

Considered

* In the above passage there seems always to be a contrast implied between the *real* and the *nominal* price of corn. It is, however, certain, that the *nominal* and *real* price of any thing must at all times be exactly the same, unless in the following circumstances.

First, If the price of any commodity, at one period of time, be compared with its price at another period, their *nominal* value may be the same, although their *real* price may be very different; because the price of the common standard by which they are compared, may have been different at these two periods; that is, the value of silver may have encreased or decreased in that time, so that an equal quantity of *it* might have been able to purchase more of any other commodities at one of these periods than the other.

Secondly, The same variation may take place between the *nominal* and *real* value

Considered in this light also, there could not be any essential difference established between the nature of corn and other commodities, which is fully implied above; for the *real value* of corn, as well as of every other commodity, is, in this sense, the price it will bring in a public market. This, therefore, cannot be the meaning of it.

There is another way in which mankind sometimes estimate the *real value* of a thing, viz. by comparing its value with that of other commodities, not only in the home market, but in all o-

lue of any commodity at the same period in different countries; because the value of money may be higher in the one of these countries than in the other; by which means the same quantity of silver may purchase a greater quantity of goods in the one case than in the other.

Thirdly, The value of the same nominal quantity of silver, may be different at different periods, or in different countries, by giving the same denomination to pieces of silver of different weights in these different circumstances; so that the same nominal sum of money shall express a greater weight of silver in the one case than in the other.

In all these ways may a variation take place between the *nominal* and the *real* value of any commodity. But in all these cases the commodity whose value is mentioned, must be compared with others, either *at different periods of time*, or *in different countries*; for it is impossible but the *nominal* value of any commodity, that is, the quantity of money it is able to purchase, must be exactly the same with its *real* value, considered in a commercial view, when compared with other commodities in the same country at the time.

It will perhaps occur to the reader, that every difficulty would disappear, and that Dr Smith's reasoning would be here plain and consistent, if we were to suppose, that the price of grain had such an immediate influence on that of all other commodities, as necessarily to make the nominal price of each of these, on all occasions, to rise and fall with every fluctuation in the price of grain. But this is a supposition so directly contrary to experience, that it would be an insult on Dr Smith to suppose we should understand it in that way.

other

ther parts of the world. In this sense, however, we are farther from our purpose than before; because the real value of grain considered in this light, would admit of greater variations than that of almost any other commodity; as it may happen, that the money which can be procured for an equal quantity of grain in one country, shall be extremely different from what could be procured for it in another; and therefore the quantity of subsistence it could procure from any third country, to the different original proprietors, would be exceedingly dissimilar. This, therefore, cannot be the meaning.

“Through the whole world, (says he), in general that value is equal to the quantity of labour it can maintain.” But neither do we here meet with the discriminating circumstance we are in search of. By the word *maintain* can be meant nothing else than *procure* immediately in exchange either for *itself in substance*, or for its *price*, which is the same thing; so that it might be equally read, the quantity of labour it can *purchase*. But is it not equally true, that through the whole world the value of a yard of cloth, or a paper of pins, is equal to the quantity of labour it can purchase? In this sense, the value of every commodity would be equally immutable with that of corn: for there can be no doubt, but the value of every commodity, through all the possible variations of price it may be made to undergo, will at all times be equal to the quantity of labour it can purchase; or, in other words, the value, that is, the price will be equal to the price. But this would be a play upon words, or rather a jingling of words, without meaning, that we cannot suppose Dr Smith could be capable of employing.

I am further confirmed in the idea that I do not comprehend the meaning of the passage quoted above about the immutable value

value of corn, from observing, that Dr Smith, in other passages, reasons about the means of encouraging or discouraging agriculture, and raising or depressing the value of grain, in proportion to that of other commodities, exactly in the same manner as any other man would do, who viewed this as a manufacture that admitted of being encouraged or depressed by wholesome or foolish regulations, in the same manner as any other manufacture *.

If

* "When a landed nation," (says he, p. 296.), "on the contrary, oppresses either by high duties, or by prohibitions, the trade of foreign nations, it necessarily hurts its own interest in two different ways. First, By raising the price of all foreign goods, and of all sorts of manufactures, *it necessarily sinks the real value of the surplus produce of its own land*, with which, or, what comes to the same thing, with the price of which, it purchases those foreign goods and manufactures. Secondly, By giving a sort of monopoly of the home market to its own merchants, artificers, and manufacturers, it raises the rate of mercantile and manufacturing profit in proportion to that of agricultural profit; and, consequently, either draws from agriculture a part of the capital which had been employed in it, or hinders from going to it a part of what would otherwise have gone to it. This policy, therefore, discourages agriculture in two ways: first, *by sinking the real value of its produce*, and thereby lowering the rate of its profit; and, secondly, by raising the rate of profit in all other employments."

But if "the nature of things has stamped upon corn a real value which no human institution can alter," how would it be possible for the above-mentioned arrangement, "necessarily to sink the real value of the surplus produce of the land?"

Or if "the money-price of corn regulates that of all other commodities," whence comes it that by the above arrangement the rise in the price of manufactures "necessarily sinks the value of the produce of the land?" for in this case it is the manufactures that regulate the price of corn, and not the corn that regulates the price of the manufactures.

"The inhabitants of the town (he also observes, p. 286.) draw from the country the rude produce which constitutes both the materials of their work, and the fund of their subsistence; and they pay for this rude produce by sending back to

"the

If the reasoning of Dr Smith about the pernicious tendency of the bounty on corn has been unsatisfactory, it will be found that he is still more unlucky with regard to the facts that ought to

“ the country a certain portion of it manufactured and prepared for immediate
 “ use. The trade which is carried on between these two different sets of people,
 “ consists ultimately in a certain quantity of rude produce exchanged for a certain
 “ quantity of manufactured produce. *The dearer the latter, therefore, the cheaper*
 “ *the former*; and whatever tends in any country to raise the price of manufactured
 “ produce, tends to lower that of the rude produce of the land, and thereby to discour-
 “ age agriculture. The smaller the quantity of manufactured produce which
 “ any quantity of given produce, or, what comes to the same thing, which the
 “ price of any quantity of rude produce, is capable of purchasing; *the smaller the*
 “ *real value of that given rude produce*, the smaller the encouragement which either
 “ the landlord has to encrease its quantity by improving, or the farmer by culti-
 “ vating the land. Whatever, besides, tends to diminish in any country the num-
 “ ber of artificers and manufacturers, tends to diminish the home market, the
 “ most important of all markets, for the rude produce of the land, and thereby
 “ still farther to discourage agriculture.”

I own it appears to me a little strange, that the money-price of corn, “ which regu-
 “ lates the price of all other commodities,” p. 94. should now be lower in propor-
 “ tion as the price of manufactured produce is higher.— Equally strange it is, that
 “ the real value of the rude produce of the land should fall lower as the price
 “ of manufactured goods rises higher;” seeing that “ neither the bounty, nor
 “ any other human institution, can have any such effect.” p. 93. “ No bounty
 “ upon exportation, no monopoly of the home market can raise it. The freest
 “ competition cannot lower it. The nature of things has stamped upon corn a
 “ real value, which no human institution can alter.” p. 101.— If it be true, that
 “ the smaller quantity of manufactured produce, which any quantity of rude pro-
 “ duce, or the price of that rude produce, is capable of purchasing, the smaller
 “ the real value of that given rude produce; and the smaller the encouragement
 “ which either the landlord has to encrease its quantity by improving, or the
 “ farmer by cultivating the soil,” p. 286. ; can it likewise be true, that when “ you
 “ raise the nominal or money price of corn, you do not raise its real value? you do
 “ not encrease the real wealth, the real revenue, either of our farmers or country-

to support it: for these, instead of corroborating his hypothesis, oppose it in the most direct manner.

Not to lay any stress on the great fluctuation in the price of grain that used to take place in the British market of old, nor of the extraordinary height to which it rose on some occasions, as already taken notice of, it is enough for our present purpose to rest barely upon the acknowledged depression in the price of grain that has taken place in England since the bounty was granted; as this alone seems to furnish an unanswerable argument against the hypothesis he has adopted.

It will hardly be denied, that the value of the precious metals hath decreased in Britain since the law granting a bounty on corn

"gentlemen? you do not encourage the growth of corn, because you do not enable them to employ more labourers in raising it?" p. 101. Is not the *real* value of that rude produce, the same with the *nominal* value, or price it will bring in money in proportion to that which can be obtained for other goods?

If, again, it be true, that "agriculture may be discouraged" by having the price of manufactured goods raised, and thus "lowering the value of the rude produce of the land," will it not follow, that a contrary effect would result from an opposite conduct? And if the landlord, by this depression of the price of the rude produce of his soil, "will be discouraged from increasing the quantity (of grain) by improving, or the farmer by cultivating his land," does it not necessarily follow, that by raising the price of their rude produce, the farmer would be induced to cultivate, and the landlord to improve his soil, and both of them thus help to increase its quantity? How then can we be induced to believe, that the bounty, which, in Dr Smith's opinion, always tends to raise the price of grain, "can in no respect promote the raising of that particular commodity of which it was meant to encourage the production?" p. 102. See also pages 455. 465. 486. 488. &c. in which arguments of the same sort with those above occur.

was enacted; and that, by consequence, the price of almost every commodity has risen proportionally in that period. But corn since that time has decreased even in its *nominal* value; it has therefore decreased in its *real* value in a much higher proportion.— Whence, I ask, arises this singular exception to the general rule, if it is not to be ascribed to the influence of the bounty?

This objection did not escape the attention of Dr Smith: but he seems to have disregarded it so much, as hardly to think it required a serious answer; as the only one he has assigned, will hardly be admitted as such.

“The improvement,” says he, “and prosperity of Great Britain, which has been so often ascribed to those laws, (the corn-laws), may be very easily accounted for from other causes. That security which the laws of Great Britain give to every man that he shall enjoy the fruits of his own labour, is alone sufficient to make any country flourish, *notwithstanding these, and twenty other absurd regulations of commerce*: and this security was perfected by the revolution, much about the same time that the bounty was established *.”

But this does not seem to solve the difficulty. For if the farmer, in consequence of that general security, has been enabled to cultivate his ground better than formerly; — has not the manufacturer, by the same security, been enabled to carry on his business to greater perfection also? — and if the farmer *now*, in consequence of that security, sells his corn cheaper than before; — ought not the manufacturer, on a double account, viz. first on

* p. 127.

account of that general security ; — and secondly, because of the low price of bread-corn, to sell his manufactured goods still cheaper in proportion than the farmer ?

On another account, still, ought the manufacturer to have lowered the price of his manufactures still farther than the farmer that of his grain, if no other cause but the general security could have operated in producing this change in the country. For Dr Smith himself justly observes *, that “ the improvements in the productive powers of useful labour, depend, first, upon the improvement in the ability of the workman ; and, secondly, upon that of the machinery with which he works. But the labour of artificers and manufacturers, as it is capable of being more subdivided, and the labour of each workman reduced to a greater simplicity of operation, than that of farmers and country-labourers, is likewise capable of both these improvements in a higher degree.”

This general security, therefore, ought to have lowered the price of every other manufacture in a much higher proportion than that of grain : — But the price of almost every manufacture has encreased considerably since that period, while that of grain has decreased ; — therefore it cannot be ascribed to that cause.

Again, — If the bounty on corn had tended to raise the price of that commodity, “ both in times of plenty and in times of scarcity also,” — it must naturally have followed, that the average

* p. 275.

price of grain on those places of the sea-coast from whence the greatest exportation always takes place, should be higher than in those parts of the country which are so situated as hardly to admit of being affected by the bounty.—This, however, is so far from being the case, that circumstances are directly the reverse.—For it appears, by the prices of grain that have been published by authority in the Gazette for several years past, that when wheat in the counties of Middlesex, Essex, Suffolk, and Norfolk, (from which counties almost all the exports from England are made), is about 4s. per bushel; in the inland counties of Wiltshire, the internal parts of Somersetshire, Staffordshire, Shropshire, &c. it sells at an average about 5s. 6d. or 6s. per bushel. This fact, therefore, militates as directly against the hypothesis of Dr Smith as the former.

I shall just beg leave to produce one other fact in opposition to this hypothesis, which is of such importance as it would be inexcusable in me to omit.

According to his mode of reasoning, if two kingdoms could be found that were alike in other respects and only differed in this, That a bounty on exportation of corn was allowed of in the one, in consequence of which much corn was exported, whereas in the other that bounty either was not allowed of, or had never been claimed; the price of grain should have risen much higher in proportion to that of other manufactures in the first than in the last.

England and Scotland furnish us with an opportunity of making the comparison. For both of these are governed so much after the same manner, and have had the general security of the subject protected so much alike, that we can hardly mention a
circumstance

circumstance of great moment that is not common to both, unless it be the influence of the corn-laws. For although the bounty has produced great effects in England, it is believed there never was a shilling paid of bounty on exported corn from Scotland *; therefore the price of corn ought to have risen much more in England since this law was enacted, than it has done in Scotland during the same period.—How does the fact stand?

It is allowed on all hands, that the average money-price of corn has fallen considerably in those counties in England from which corn may be exported, since the bounty took place.—To ascertain what was the case in this respect in Scotland, I applied for an extract of the price of meal by the fiars † of Aberdeenshire, from the sheriff's books in that county, as far back as they could be obtained quite regular, which was from the year 1705 to 1775, both inclusive, as is expressed in the following table; which is

* To prevent cavils as to this article, the reader is desired to take notice, that whatever may possibly have been the case in other parts of Scotland, I am well authorised to affirm, that no bounty was ever paid for grain or meal exported from the port of Aberdeen; so that the reasoning from the following table cannot be affected by what may have happened at other places.

† For the sake of the English reader it may be necessary to inform him, that the word *fiars* in Scotland means the legal average prices of grain, which are ascertained every year in each county by the sheriff; who, in the month of March, summons a certain number of country-gentlemen and farmers, and an equal number of dealers in grain, who form a sort of jury, having power to examine, upon oath, any persons they incline, with regard to the prices that have been already given for grain of the preceding crop, and the probable prices that may be expected for the remainder of the season; from all which they fix on a price as near the medium selling-price as they can; which serves as a standard for factors and curators counting with their constituents or wards.

divided

divided into periods of ten years each, with the average price of each period computed *.

* The prices here mentioned are all in Scots money : of which one pound is equal to one shilling and eight pence Sterling ; a shilling Scots equal to a penny Sterling ; and a penny Scots equal to one twelfth of a penny Sterling.— Hence the first-mentioned price, L. 3 Scots, is equal to 5 s. Sterling ; and so of the others.

A

A TABLE*, shewing the price of Oat-meal in Aberdeenshire, from the year 1705 to 1775, both inclusive.

Extracted from the Sheriff's book of Fiars for that county.

A.D.	Price. L. s. d.	Average. L. s. d.	A.D.	Price. L. s. d.	Average. L. s. d.	A.D.	Price. L. s. d.	Average. L. s. d.
1705	3 0 0		1725	4 16 8		1745	6 13 4	
1706	2 13 4		1726	4 6 8		1746	4 16 0	
1707	3 6 8		1727	4 13 4		1747	3 16 0	
1708	4 13 4		1728	5 13 4		1748	4 13 4	
1709	5 0 0	3 16 9 ⁶ / ₁₀	1729	4 13 4	4 10 8	1749	4 3 4	5 4 6 ⁴ / ₁₀
1710	5 0 0		1730	4 3 4		1750	4 13 4	
1711	3 6 8		1731	4 13 4		1751	6 13 4	
1712	3 0 0		1732	3 6 8		1752	6 13 4	
1713	4 0 0		1733	4 6 8		1753	5 10 0	
1714	4 8 0		1734	4 13 4		1754	4 13 4	
1715	3 6 8		1735	5 6 8		1755	6 6 8	
1716	3 6 8		1736	4 13 0		1756	8 0 0	
1717	4 3 4		1737	4 13 0		1757	7 4 0	
1718	4 3 4		1738	3 13 0		1758	4 6 8	
1719	4 6 8		1739	5 6 8	4 17 3 ⁶ / ₁₀	1759	3 16 0	5 17 4
1720	3 10 0	4 0 4	1740	7 0 8		1760	4 0 0	
1721	3 10 0		1741	5 6 8		1761	4 10 0	
1722	5 0 0		1742	4 0 0		1762	8 0 0	
1723	5 10 0		1743	3 4 0		1763	5 10 0	
1724	3 6 8		1744	5 10 0		1764	7 0 0	
From to Average. Rise.								
1705	1715	3 16 9 ⁶ / ₁₀	1705	1715	3 16 9 ⁶ / ₁₀	1705	1715	3 16 9 ⁶ / ₁₀
1715	1725	4 0 4	1715	1725	4 0 4	1715	1725	4 0 4
1725	1735	4 10 8	1725	1735	4 10 8	1725	1735	4 10 8
1735	1745	4 17 3 ⁶ / ₁₀	1735	1745	4 17 3 ⁶ / ₁₀	1735	1745	4 17 3 ⁶ / ₁₀
1745	1755	5 4 6 ⁴ / ₁₀	1745	1755	5 4 6 ⁴ / ₁₀	1745	1755	5 4 6 ⁴ / ₁₀
1755	1765	5 17 4	1755	1765	5 17 4	1755	1765	5 17 4
1765	1775	7 13 0	1765	1775	7 13 0	1765	1775	7 13 0
Rise fr. 1705 to 1775 3 16 2 ⁴ / ₁₀								
Average before 1715 3 16 9 ⁶ / ₁₀								
Difference 0 0 7 ² / ₁₀								

* This Table is divided into three columns: — containing, — 1. The Year; — 2. The Price of Oat-meal per boll of eight stone; — 3. The Average prices every ten years.

From this table it appears, that instead of falling, as in England, the prices have gradually risen during all that period, nearly in the same proportion with the prices of almost every other commodity in that kingdom, in consequence of the decrease of the value of money, occasioned by the encrease of trade, &c. in that time.—Corn, therefore, in this country, is affected by the general decrease of the value of money, as well as every other commodity; but, in England, the nominal price of corn has at least remained stationary, while that of all other commodities has been nearly doubled; for which I apprehend it is impossible to assign any other satisfactory reason but the operation of the corn-laws.

To conclude,—It is certain, that if no over-ruling influence had prevented it, the price of grain would have risen in England, in the same proportion with that of all other commodities, in consequence of the general decrease in the value of money:—but the price of grain has not only not risen since the bounty was instituted, as has been the case with all other commodities, but has even fallen since that period: therefore it has been kept thus disproportionately low by the powerful over-ruling influence of some cause.

If this effect had been produced by the general security, as to property, that the subject now enjoys in Great Britain, the same cause would have operated still more powerfully in moderating the price of labour and manufactures.—But the price of labour and of manufactures has encreased since that period;—it must therefore be attributed to some other cause.

If “the bounty had always raised the *nominal* price of grain *,”

* p. 93. *et passim*.

that article of produce must have had its nominal value augmented, not only as much, but even more than that of any other commodity, since the bounty took place. — But the *nominal* value of that commodity has decreased since that time, while that of all other commodities has increased; therefore the bounty on corn has not increased its nominal value.

If “the price of corn had absolutely regulated the price of all other commodities *,” the price of every other commodity must by consequence rise or fall, as the general average money-price of corn rises or falls in any country. But the average money-price of corn in England has been lower since the bounty took place, than it was before that period, although the price of all other commodities is now higher than formerly; therefore the price of corn does not absolutely regulate the price of labour and of all other commodities.

If “it is impossible to alter the *real* price of corn by any contrivance †,” and if “the real price of any commodity be the quantity of labour it can maintain or procure ‡;” it must follow, that the price of one determinate quantity of corn will, at all times, and in all places, be capable of purchasing an equal quantity of labour:—but as it requires a much greater quantity of money *now* to purchase the same quantity of manufactures, or of labour, than it did fifty years ago; and as the same quantity of corn cannot at this time purchase so much money as before the bounty took place;—it follows, that the *real* price of corn is much lower at present than it was at some former period;—therefore it is possible to augment or diminish the *real* value of corn, as well as of every other commodity.

* P. 101.

† P. 101.

‡ P. 286.

But if the *nominal* value of corn has decreased since the bounty was established ; and if, in consequence of that, its *real* price be not now much more than one half of what it formerly was ; and if no other probable cause can be assigned for this but the operation of the bounty, and the other corn-laws ; and if these laws explain in a satisfactory manner all the phenomena above enumerated ; we shall then be obliged to acknowledge, that instead of being “ an absurd regulation of commerce,” it is perhaps the wisest and the best political institution that has ever graced the annals of any nation.

I am happy, in the close of these very long remarks, to be able to concur entirely with this very sensible author, with regard to the very great utility of an unlimited freedom on all occasions to the internal commerce of grain. Without this assistance, the bounty can produce but a very limited and partial effect in regulating the price of grain, or benefiting the country.—Every law, therefore, which tends in the most distant manner to cramp the internal commerce of grain, as it is alike prejudicial to the interests of agriculture and manufactures, and by consequence to every individual of the state, ought to be instantly repealed.—They are badges of the ignorance of our forefathers, which we should endeavour, as soon as possible, to bury in oblivion. Whatever tends to render the internal corn-merchant secure in his person and property, and to facilitate the commerce, and easy transportation of grain from place to place, is highly beneficial, as it tends in a lesser degree to give the same stability to the internal market of the country, that the bounty necessarily would procure upon the sea-coast. The reasoning of Dr Smith on this branch of the subject is just, clear, and convincing. To it therefore I refer the curious reader for farther satisfaction :—it deserves in particular

particular the serious attention of every person who is concerned in the legislative council of the nation.

I have heard of no country that has adopted a similar plan of legislation with regard to the commerce of corn with that of England; — nor are there many countries to which it could be so beneficial if a similar system should be adopted; for, on account of the small dimensions of our island, few places are so far removed from the sea-coast, as not to feel in a lesser or greater degree the effects of the demand that may arise from that cause.

The great importance of the subject agitated in this postscript, together with the very high opinion that the public justly entertain of the respectable author whose opinions I have been obliged to controvert, will, I hope, plead my excuse for the very great length of this article. In disquisitions of such an important nature as the present, no man who treats of them is excusable, if he allows any opinion to pass uncontroverted, which, according to his opinion, may be erroneous; nor is it allowable in him to use short and obscure hints, that may be only understood by men of genius and reflection, but plain arguments, that may be, if possible, within the reach of all. — This necessarily leads to tediousness. — If I have used the freedom to criticise another, I shall hope to meet with the same treatment myself where-ever I have erred. — It is of no moment to the public *who* it is that shall be right, or who is in the wrong; but it may be of high importance to the nation, that the truth in this case should be with certainty discovered.

I shall just beg leave to add a few words with regard to the corn-laws of Scotland, before I conclude this important digression.

Of the CORN-LAWS with regard to Scotland.

SCOTLAND has hardly been as yet in any respect benefited by the British corn-laws; as these laws have never yet been properly adapted to the nature and circumstances of that part of the island.

Wheat is the principal crop in England, for which there is an extensive market in Europe at large, at all times. But from the natural barrenness of Scotland in general, oats has ever been the principal crop of that part of the island; and this kind of grain must long continue to furnish food to the lower ranks of people in it. But the great bulk, and very low price of oats, renders it a far less proper article of export than wheat; and as the sale of *that kind of grain* is confined to a very few places on the continent, there never has been a steady demand for it abroad; so that when accidental plenty comes, there is no ready vent for it. Merchants in that article would not have employment at all times, and therefore cannot be readily found when most needed; and the country experiences nearly the same inequalities in the price of grain as if no bounty had ever been granted upon exporting it from Scotland. And indeed the law with regard to this particular is so injudiciously framed, as to be incapable of producing any beneficial effects at all, as a slight review of the corn-laws of Scotland will plainly show.

By the statute 13th George III. cap. 43. it is enacted, That
oats or oat-meal may be imported into *any port of Great Britain,*
when

when the price is at or above 14 s. per quarter. But by a subsequent clause of the same statute, it is expressly ordained, That it shall not be lawful to import any oats or oat-meal into Scotland, while the price of middling oats is not at or above 16 s. per Scots boll, which is nearly the same as 22 s. per quarter. By this law, therefore, although oats may be imported into England whenever the price is above 14 s. they cannot be imported into Scotland till the price is at least 22 s. per quarter. What was the reason for this extraordinary difference, it is difficult to say, unless it was intended to raise the price of grain in Scotland in scarce years, to such a rate as to create a sort of famine. And I have already had occasion to show, p. 303. that this regulation must necessarily tend to hurt the interest of the farmer and country-gentleman, whom it seems to have been intended to serve.

By the same statute it is declared, That when the price of middling oats is at 14 s. per quarter, or under, it shall be lawful to export oats; and that a bounty of 2 s. shall be granted for every quarter of oats, and of 2 s. and 6 d. for every quarter of oat-meal, then exported, reckoning 276 lb. Troas a quarter of oat-meal; that is to say, when middling oats sell for 10 s. 4 d. per Scots boll, or under, in Scotland, a bounty of about 1 s. 4 d. per boll, shall be allowed on exporting oats or oat-meal, reckoning eight stone Amsterdam a boll, and nothing more. This bounty cannot tend to relieve the farmer, as the price at which it may be claimed is too low, and as the bounty itself is too inconsiderable to produce any sensible effect; nor has it ever, that I know of, been claimed in any one instance.

By these absurd regulations, a provision is made to prevent the possibility of moderating the price of grain in Scotland in years of

of scarcity, and no effectual provision is made for opening a foreign market, and keeping the price reasonably high, in years of plenty; which must subject the inhabitants to all the grievous inconveniencies that arise from great and sudden fluctuations in the price of this necessary article of life. Far better would it have been to have allowed Scotland to remain on the same footing with England, as to the commerce of oats, than to have added the destructive clause against the importation of oats to that country: for although the bounty is too inconsiderable to give any assistance to the farmer, the other inhabitants would at least have been able to get bread-corn on some occasions cheaper than at present, and the farmer would have been in less danger of being ruined by offering immoderate rents, in hopes of obtaining always the high monopoly-price for grain.

I am far, however, from wishing to see the regulations in England with respect to the commerce of oats implicitly adopted in Scotland, as this would at best be only exchanging one imperfect regulation for another that is worse. Oats, it ought always to be remembered, is the principal crop in Scotland. It is far otherwise in England; and therefore that kind of corn requires less to be attended to by the legislature there than here. The nature of different countries too with regard to fertility, situation, &c. will often make a particular regulation as to the commerce of grain, extremely prudent for the one, that would be very improper for the other; and therefore the circumstances of each ought to be peculiarly attended to in forming laws for regulating this kind of commerce.

I have frequently had occasion to observe, that the great use of a bounty is to regulate the price of grain, and to keep it as moderate,

derate, and as steady, as the nature of things will admit of. To do this effectually, there are two principal objects that ought to be chiefly attended to. The first of these is, to ascertain as nearly as possible the *intrinsic* value of each particular kind of corn in the country where the regulation is intended to be made; and the second is, to ascertain the price at which the same kinds of grain can in general be sold for in any foreign market to which it may be carried, together with the expence of transporting it thither. It should be the first of these circumstances that ought to regulate the price at which importation may with propriety be admitted, and a bounty on exportation commence. It is the second that ought to regulate the amount of that bounty.

Corn cannot be reared without a certain expence of labour, nor can it be brought to market unless the cultivator receives a price sufficient to indemnify him for that expence. It is the wages of this labour necessary for producing grain that I call its *intrinsic* value.

In a country that possesses a very fertile soil, it is evident, that the same quantity of grain may be reared, and brought to market, at a much smaller expence than in one that is more barren. The intrinsic value of the corn, therefore, must be higher in the last country than in the first; and, by consequence, the average price of corn may, with safety, be much lower in proportion to other commodities in the fertile than in the barren country. If the legislature, by any regulation of commerce or police, should contrive to bring the average price of corn in a barren country lower than this real intrinsic value, the farmer would be obliged to desert that employment, the grounds would remain uncultivated, and the inhabitants would be obliged to depend on foreign nations

tions alone for their subsistence. But as it is universally acknowledged, that the most essential riches of any country consist in the produce of the soil, any regulation that tended to diminish that produce, would be destructive; it ought, therefore, to be the study of the legislature, to encourage the cultivation of the fields, so as to make the produce, if possible, sustain all its inhabitants.

In every country there are various soils, which are endued with different degrees of fertility; and hence it must happen, that the farmer who cultivates the most fertile of these, can afford to bring his corn to market at a much lower price than others who cultivate poorer fields. But if the corn that grows on these fertile spots is not sufficient fully to supply the market alone, the price will naturally be raised in that market to such a height, as to indemnify others for the expence of cultivating poorer soils. The farmer, however, who cultivates the rich spots, will be able to sell his corn at the same rate in the market with those who occupy poorer fields; he will, therefore, receive much more than the *intrinsic* value for the corn he rears. Many persons will, therefore, be desirous of obtaining possession of these fertile fields, and will be content to give a certain premium for an exclusive privilege to cultivate them; which will be greater or smaller according to the more or less fertility of the soil. It is this premium which constitutes what we now call *rent*; a medium by means of which the expence of cultivating soils of very different degrees of fertility may be reduced to a perfect equality.

In countries, therefore, of moderate fertility, it is prudent to fix the average price of grain at a rate high enough to enable the farmer to cultivate so much of those unfertile fields as will be sufficient

ficient to furnish grain to supply the whole inhabitants with food in the scarcest years, that thus they may never be in danger of wanting this essential necessary of life.

But if they rear so much grain as will sustain the whole inhabitants *in years of scarcity*, there will be much more than enough for them *in years of plenty*. A market, therefore, must be provided for this surplus produce, to prevent the unreasonable degradation of price on these occasions.

If the country in question be more fertile than those around it, the average price in these surrounding nations will be so much higher than the intrinsic value of the grain in the home market, as will require no other encouragement than barely to allow of exportation, perhaps at all times, or whenever it falls so low as to be near the intrinsic value of the corn. This is the case with Egypt, Sicily, and Poland; in which countries grain can be reared at such a low price, as to admit of being transported to other countries at all times without any bounty.

But if the average prices in the surrounding nations should be nearly equal with the intrinsic value at home, it would be necessary to grant a small bounty on exportation when the prices fell too low, so as to pay the whole expence of freight, &c. in transporting it to foreign markets. This is in some measure the case with England in respect of wheat at present.

But if the average price of grain in the neighbouring states should, in years of moderate abundance, be as low, or lower than the intrinsic worth of grain at home, the bounty ought to be so high as to repay, not only the price of freight, but also the

difference between the price of grain in that foreign market, and its intrinsic value at home; otherwise it cannot be exported without loss; and by consequence the trade could not be continued. This seems to be the case with Scotland; as there is some reason to suspect, that the average price of oats and oat-meal is as low in most of the surrounding nations, as it can be afforded for in Scotland; and in some countries it is certainly lower.—It would, therefore, seem probable, that the bounty on the exportation of oats from Scotland would require to be rather higher in proportion to its value, than of the wheat in England.

I am not sufficiently acquainted with the nature of the countries that might become the purchasers of our superfluous grain, to be able to say precisely what the amount of that bounty ought to be; nor am I possessed of enough of facts to be able to fix with absolute certainty the rate at which that bounty should be granted. I therefore have explained the general principles upon which these regulations ought to be founded; and offer the following table, not as being absolutely right, but as an approximation towards it, which would be at least much more perfect than the present system of corn-laws; and which, if it should be found defective in any respect, might easily be altered, so as to be productive of the most beneficial effects to the country at large; and by consequence to the gentlemen of landed property and farmers, although it has not the appearance of so directly benefiting them as the last regulation with regard to the commerce of grain seems to have.

A table, shewing the rates at which oats or oat-meal might be permitted to be exported from, or imported into Scotland, with the bounty on exportation, or premium on importation, at all different prices.

Oats per boll, Scots measure, or oat-meal, at eight stone per boll, including all oats so far manufactured as to be deprived of their husks, when at

should receive of bounty on exportation,

s.	s.	d.
8 or under, -	3	0
9 - - -	2	6
10 - - -	2	0
11 - - -	1	6
12 - - -	1	0
13 - - -	0	6
14 Exportation to cease, and importation be permitted.		
15 A premium to be granted of	0	6 on importation.
16 ditto, - - -	1	0
17 ditto, - - -	2	0
18 and all above, -	3	0

In the above table, I have adhered to the Scots boll in preference to any other measure, not only because it is better known in Scotland than any other, but also because of its coincidence with a boll of meal of the legal standard in Scotland; as it is well

known that a Scots boll of good oats will in general yield a boll of meal, or very nearly so. This allows for the same bounty to apply for a boll of meal or a boll of oats.

I have likewise supposed it would be equally expedient to grant a bounty on the exportation, and premium on the importation, of oat-meal, as of oats in grain; because, as it can be transported in that state to a distant market about 200 per cent. (including freight and insurance) cheaper than oats, it would be a great saving to the nation to be permitted to transport it in this state, whenever circumstances would admit of it. It would, moreover, tend to promote our own manufactures in some degree, by milling our own oats intended for exportation; and it would farther afford a sort of temptation to the farmer to rear better grain, than he would do were the oats to be exported in substance.

The only objection of weight that I can perceive against this plan for regulating the corn-trade, is the difficulty of ascertaining the prices on all occasions, so as to fix the rate of the bounty to be granted, without disputes or ambiguity. And as the British legislature seem as yet to have discovered no proper method for ascertaining the prices of grain with a view to the bounty; and as the law, as it stands at present, with regard to this particular, is liable to very great abuse; I shall endeavour to point out a plan by which these abuses might, in some degree, be obviated for the future.

Before the year 1774, the general court of quarter-sessions in England were empowered to judge of the prices of grain, and to declare when the prices were at such a rate, as by law to admit of importation,

importation, or a bounty on exportation. And, in Scotland, the same trust was reposed in the Lords of Council and Session.

But as this mode of ascertaining the prices in Scotland was found to be attended with many inconveniencies, by 13th G. III. cap. 43. it was enacted, That, for the future, the sheriff of each maritime county in Scotland, or his substitute, should enquire into, and determine, the common middling prices of British corn and oat-meal; and upon receiving the oaths of two or more persons, fix and ascertain the same by proper acts or determinations, to be subscribed by them respectively; which prices so ascertained should be accounted the legal prices in their respective stewartries or sheriffdoms, for three months; when the prices were to be again ascertained in the same manner.

A very little reflection, however, will be sufficient to discover that this plan of ascertaining the prices, is liable to still greater abuses than that which formerly took place; and that the artful corn-merchant, so long as this regulation subsists, may carry on his trade in what manner he pleases, even in direct opposition to the spirit and intention of the law; at least if he is favoured by the sheriff, or his substitute.

For, if the prices abroad should at any time be very high, although the prices at home should be such as not to allow of a bounty on exportation, or even not to allow of exportation at all, the corn-merchant, by carrying a small quantity of grain to the market, and selling it at a low rate, has it in his power to produce two or more witnesses, to swear, that they bought grain at such a price in the public market; in consequence of which the sheriff or his substitute may legally fix the price for three months at that
port

port so low as to entitle the exporter to the bounty, although the *real* selling-price at home should be considerably higher.

The same device might also be practised for getting the ports opened for importing foreign corn, when the real price in the home market was below that at which it may be permitted by law. It is besides liable to other frauds and abuses, which it is unnecessary here to enumerate.

Whether it was with a view to obviate these inconveniencies, or to answer some other secret purposes, I shall not now enquire; but in the very next session of parliament, the law, with regard to this particular, was entirely changed; it being ordained, 14th G. III. cap. 64. That, both in England and Scotland, “ the prices
“ of corn, and grain, and oat-meal, exported from this kingdom,
“ shall be regulated and governed by the average prices at which
“ such corn, and grain, and oat-meal, shall all be respectively
“ sold in the public market, at, or nearest to the port or place
“ from whence such corn, or grain, or oat-meal, shall be intend-
“ ed to be exported, on the last market-day preceding the ship-
“ ping of such corn or grain, and the respective bounties grant-
“ ed,— be paid and allowed according to such prices.”

But if the former law with regard to Scotland was bad, this is still worse; as it is equally liable to abuse as the other, and is besides attended with the peculiar inconvenience of leaving the prices continually unfixed, and thus proving a perpetual source of uncertainty, and endless disputes.

For if a merchant shall have provided a large quantity of corn for exportation, and finds that the real selling-price in the
market

market is so high as not to admit of the bounty ; by exposing a large quantity of grain unexpectedly at the nearest market-town, and selling it at a low price, he will immediately occasion the price for that market-day to be reduced so low as to entitle him to the bounty, in consequence of which he may immediately ship his grain, and claim the bounty before the next market-day. Nor could the bounty in this case, according to our present law, be refused him.

These inconveniencies seem to have been so much foreseen in Scotland, that the sheriffs in the several maritime counties have never, that I know of, paid any attention to this amendment, as it is called, of the law, but continue to fix the prices once a-quarter, as if they had still authority by law to do so.

Such is the ridiculous state of the law in Scotland at present with regard to this most essential article of commerce.

It seems to me, that these inconveniencies might be best obviated, and the prices of grain ascertained with as great a degree of accuracy as the nature of the thing will admit of, in the following manner.

Let the sheriff of each county on the sea-coast, or his substitute, be authorised and required to summon a jury of six respectable inhabitants, consisting of three country-gentlemen, or farmers, or other dealers in grain ; and three bakers or brewers, or respectable householders, in town ; who should meet with him on the first Monday of each of the months of January, March, May, July, September, and November, each year.—Let this jury, the sheriff, or his substitute, always being preses, be empowered to
examine

examine witnesses upon oath as to the real price of grain, and make use of such other aids as they shall find necessary; and, after due deliberation had, fix and ascertain the real price of grain in that place at the time, by a proper act or determination subscribed by them respectively; which price, being properly notified to the collector of the customs in that district, and duly published to all concerned, shall be accounted the legal price in that district for two months; at which time they should, in the same manner, be anew ascertained by another jury.

It is nearly in this manner that the *fiars* are annually ascertained in the several counties of Scotland at present; and it has been found by experience, that it is as little liable to abuse, as any method that can be devised. Whether it would be best for the sheriff to summon all the members for the six juries that should meet for this purpose in a year, at the beginning of that year, appointing at that time the particular month that each juror respectively was to attend; — or whether it would be best to nominate and summon the new jury immediately after the last jury had made their decision, — is perhaps of little consequence: but it would be very proper that they should be summoned at least forty or fifty days before the time of meeting, that each of them might have time to attend to the market-prices of grain, and make such enquiries with regard to it, as might enable him to give a proper decision.

By pursuing such a plan steadily for some years, it is not to be doubted, but that Scotland might have the price of grain kept much more steady than it ever has been, and also lower upon an average of years; which would encourage agriculture and manufactures

factures more effectually than any other contrivance that has ever yet been, or perhaps could be adopted.

I have hitherto spoken only of the encouragement that may be given to agriculture, and the beneficial consequences that may result to the community, by encouraging the exportation of grain in substance ; but as exportation of grain can only take place near the sea-coast, and as the transporting it in that state is always attended with considerable expence and risk, it would on many occasions be much more beneficial to a country to promote the exportation of grain after it is manufactured, than in its rude state.

The nature of the manufactures that would require to be encouraged with this view, must vary according to the nature of the country. In a nation that possessed a very fertile soil, and enjoyed a serene climate, wheat may be manufactured into starch. In some cases ale, or malt-liquors of other denominations, may be exported as an article of commerce ; and on some occasions it may be more convenient to export it in the state of distilled spirits.

This last is perhaps the only manufacture of corn that could be carried on with profit in Scotland ; and, under proper regulations, might, in all probability, be attended with effects highly beneficial. It is not perhaps beneficial to the country itself to reduce the price of corn-spirits too low in Britain, and therefore it may be prudent to continue the revenue-laws at present in force with regard to distillers : but no harm could result to us from reducing the price, as to other nations, as low as possible. If therefore a drawback equal to the whole amount of the excise-duty were allowed upon the exportation of home-made spirits, when grain was selling in the home market at the low prices at which the bounty is just now

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allowed,

allowed, our grain, instead of being exported in substance, might find its way into foreign countries at a much less expence in the state of spirits; and if the drawback were discontinued when the price of malt rose to the same rate at which the bounty is discontinued, it would perhaps be attended with still more beneficial effects to the nation, and be less heavy upon the revenue than the bounty on malt at present.

Something of this kind was attempted during the administration of Mr Pitt towards the end of the last war, but with that destructive unsteadiness of counsels which so eminently distinguished the administration of this popular leader, in every thing that regarded the internal prosperity of the state. It was hardly well enacted before it was again repealed; and the idea has never, that I know of, been adopted by any of his successors*.

* Of all the curses that can come upon a nation that is governed by law, nothing can be so destructive as fluctuating counsels in its governors, as these perpetually changing laws sport with the property of individuals in the most shameless manner. In the year 1757, on account of the high price of grain, Mr Pitt at once passed a law prohibiting distillation entirely, by which many thousands of industrious subjects who carried on this manufacture, were thrown entirely out of employment. But as this was judged expedient for the good of the other subjects of the state, it was complied with without murmuring. In a few years after that, when the price of grain had again fallen to its ordinary rate, distillation was again allowed of, and very great favours were granted to those who should distill for exportation, if the stills were made of an enormous size for that purpose.— When this law had been in force one year, and many persons had procured legal stills at a vast expence; without any regard to the hardships that they must be subjected to, and without any apparent reason for it, this law was instantly repealed, so that their labour went for nothing; and several other laws succeeded, varying from one another in several respects, without any apparent cause; which were successively obtained by the influence of ministerial favourites, to serve their own ends, without regard to the loss that the public thus sustained, or the cruel hardships to which it subjected many industrious subjects of the state.

O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R F O U R T E E N T H.

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C O N T E N T S.

Farther objections : — “ England would oppose the establishing the woollen manufacture in Scotland.” — Answers : — Such an opposition would be absurd, as she could not hurt Scotland without hurting herself. — The union has been attended with the most beneficial consequences to England ; and these effects will be still increased by cherishing Scotland. — America has been too much encouraged, and Scotland neglected, for some time past. This conduct impolitic. — The trade to Scotland has been more beneficial to England for a century past, than that to America. — Exemplified by a minute examination of the nature of the trade to both places. — This gainful trade from England to Scotland cannot continue, if the last shall become poor ; which she must do, if her manufactures are not encouraged.



O B S E R V A T I O N S
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N A T I O N A L I N D U S T R Y.

L E T T E R F O U R T E E N T H.

To Mr ***** London.

DEAR SIR,

I Now come to consider the last objection you have made to the plan proposed for introducing a fine breed of sheep into the Highlands of Scotland, and establishing a woollen manufacture there, viz. "That the English, ever jealous of any rival in this their favourite manufacture, would take fire at the first mention of such a proposal, and oppose it by every device they could invent; so that they would probably crush it in its infancy, and
make

make it come at last to nothing, as they formerly did the Scottish plan of effecting a settlement at Darien."

This objection has been often urged to me; and I find that many persons in Scotland seriously apprehend there is much opposition to be expected from that quarter. But I, for my own part, am disposed to be of a contrary opinion. I make no doubt indeed but the populace, the giddy mob, headed by their mock *patriotic* leaders, would make a great noise about an affair of this kind, and sound an alarm, as if *Magna Charta* itself, and all their valuable privileges, were to be sold to the Scots for a mess of pottage. But is it to be imagined, that any sober man who thinks seriously upon the subject, could be in good earnest alarmed at such a proposal?—As justly might the inhabitants of Surry have complained, that the nation would have been undone by establishing the woollen manufacture in Yorkshire, as that the British dominions would be hurt by disseminating the blessings of industry and plenty through every corner of the realm.

Scotland is now a part of the British dominion as much as Northumberland or Wales, and as such ought to contribute her proportion towards the public burdens of the state, and constitute a material part of the strength and importance of the realm. But where is the minister, where the man of common understanding, who does not see, that if it is in flourishing and affluent circumstances,—if its territories abound with a number of active and industrious people, it will be able to contribute more abundantly to the wants of the state, and constitute a much more essential part of its real strength and vigour, than if its few inhabitants be poor, miserable, and inactive, as at present?

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It would therefore be the height of folly in them to oppose such a proposal: for if she is rich, her riches must always flow into England; and if she is powerful, that power must contribute towards the preservation of the state.—But were it otherwise, —is she not a free state, united by a fair and equal contract with another state, equally free with herself?—Under what pretext, therefore, could her industry be checked, or her manufactures discouraged? I can see none, unless it were to promote the views of those desperate spirits who hope to reap benefit from public dissensions, and advance their own fortunes on the ruin of the state.

The genius of the English nation does not perhaps appear to such disadvantage in any other point of view, as in that easy credulity, with which the populace, and some who move in a more exalted sphere, allow themselves to become the dupes of artful and designing men. Open and candid themselves, they are not apt to suspect that others are cunning and malicious; and thus they often unwittingly become their tools, and serve to promote plans that have a natural tendency to their own destruction.—No nation ever had greater reason to feel through every corner of the realm, the many and great blessings they have enjoyed in consequence of the union with Scotland. To England these blessings have already been manifest and unequivocal; although Scotland has not yet reaped all those benefits she may have hoped to enjoy in consequence of this union. It is, therefore, in an especial manner the interest of England, and it ought to be the mutual desire of all the inhabitants of both countries, to bury in perpetual oblivion the recollection of those deadly feuds that so often proved the destruction of their forefathers, and to forget e-
very

very circumstance that could tend to point out any distinction among them.

What a dreadful state of civil discord would Britain now experience, if all the kingdoms of the heptarchy were at present considered as distinct states, and as having each of them separate interests that were unconnected with that of the whole state! or if those acts of hostilities, by which these different people long ago offended one another, should be faithfully commemorated, and an idea continually inculcated of the necessity of retaliation; and a mutual desire to retard the happiness, and prevent the prosperity, of each, should universally prevail! Happily for Britain the union of those nations was effected under the influence of wiser princes, and all these idle distinctions were quickly done away. Nor do I know an instance of any nation that followed an opposite conduct, unless it was that of Spain with regard to Portugal; who, when she got possession of that crown, was not content to enjoy this blessing with thankfulness, but, by a folly of conduct that must ever reflect disgrace upon her counsels, remembering their former animosities, she ceased not to harass them with repeated acts of cruelty and oppression, till she forced them to call the Duke of Burgundy to the throne, and to sever again that kingdom from her dominions; which, by a wiser conduct, might have continued under it till this day, and would have rendered Spain the most powerful state in Europe.

Let Britain imitate her wiser forefathers; and, by destroying all marks that tend to distinguish the several nations into which this island was once divided, strive to raise it into one great and consistent whole, whose general welfare must depend on the prosperity of all its parts. Then shall she rise, to be distinguished a-

mong the nations, not less by her internal felicity, than by her external trade and naval power, which shall long carry the British flag triumphant round the world, and make her be revered among all people and languages.

America has of late become the great object of adulation of the English nation. Britain has fought her battles for her, and protected her from the encroachments of an active and insidious foe, at a vast expence of blood and treasure, in the hope of securing to herself a gainful trade with that extensive continent, which it is doubtful after all if she will be able to obtain, while Scotland has been neglected and despised, as of no importance to the state.

It is but two years since an application was made to parliament for a small encouragement to her linen manufacture, which, to please the English, she has exerted herself to improve as much as possible for near half a century past.——But she was told, that a manufacture which needed to be bolstered up, and could not walk without crutches, was not worth the preserving, and her petition refused.——If then her linen manufacture must be laid aside, to what hand shall she turn herself but to the woollen?——Happy had it been for her if she had done so at the beginning ; and not less advantageous for England upon the whole, as she would thus in all probability have still continued her exchange of woollen goods for the linens of Germany, which is now in a great measure lost, by the woollen manufactures being established there when their linen-trade began to decline.

But although it be allowed, that the trade to America is of vast importance to Britain, and therefore deserves to be attended to as an

object of primary importance, it is highly probable, that the trade to Scotland has been for half a century past of greater value to England, and has served to employ more of her people, than the American trade has done;—and therefore deserves to have at least an equal share of her attention, and as high a degree of encouragement.

This, you will say, is an astonishing assertion. To convince you, however, that it is not thrown out at random,—please to attend to the following facts.

It is usually computed, that there are not less than two millions of inhabitants in Scotland;—and it appears, that at the highest computation that has yet been made, that of Mr Burke in the House of Commons, the British subjects in North America only amount to about one million eight hundred thousand.—At the beginning of the last war, the best calculation that could be made, did not make them to amount at the highest to one million; so that I conclude the last account is probably overcharged. But, not to dwell on these *minutiae*, it will be readily allowed, that the number of British subjects in America since the union, could not, at a medium of all the years, be near one million;—so that the inhabitants of Scotland have been, during all that period, more than double of that of the Americans.

If then Scotland has contained double the number of inhabitants that America has contained of British subjects in that period, it will follow, that she has consumed more of the manufactures of England than America has done, if it shall appear that each person in general daily uses as great a proportion of these manufactures in the one country as in the other. This will best appear

pear by taking a general view of the English manufactures consumed by each.

Scotland takes from England,
Cloths broad and narrow, — with which all but the lower ranks of people are constantly clothed, — duffles, — freezes, — blankets, — flannels, — ferges, — pirpets, &c. to a great amount:

Worsted, — camblets, — crapes, — poplins, — dorfeteens, — brilliants, — mankies, — shalloons, — durants, — temmies, &c. worn by every woman, and all from England:

Hats, fine and coarse, — entirely from England, till of late that some of the coarser sorts have begun to be manufactured here:

Silks, — velvets, — velverets, &c. to a great amount, none of which have hitherto been manufactured in Scotland:

Silk gauzes, — laces, — ribbons, — hose, — gloves, and other haberdashery wares, whose names I know not, to a very great amount:

Muslins plain and striped, — Indian chints, — painted calicoes, — handkerchiefs, — Manchester cottons, — fustians, &c.

Sewing worsteds, — ditto filks, — Grogram hair, — buttons, — tapes, — thread-lace, &c.

Cutlery wares of all sorts, — buckles, — jewels, — toys and
3 D 2 trinkets

trinkets from Sheffield and Birmingham, &c. to an exceeding great amount:

Needles,— pins,— wire,— and manufactures of wire of every fort :

Porcelain,— white and cream-coloured stone,— chrystal glaffes,— window-glafs,— mirrors, &c.

Tin plates,— plate iron,— copper and brafs:

Tea,— coffee,— fugar, — rum,— rice,— fago, &c. which, although not immediately the produce of England, are all purchased with English commodities :

Hops, — madder, — liquorice, — saffron, — dying-stuffs, and drugs :

Ale of different forts,—but especially porter, to a most flameful amount :

Besides near one fourth part of the rents of Scotland, computed to be usually spent in England ; which article alone, at the most moderate estimation, may be computed at a medium to amount to between four and five hundred thousand pounds Sterling.

In return,— England takes from Scotland,

A small quantity of linen,—and some linen threads ; all of which are manufactured of foreign materials :

Fresh

Fresh and pickled falmon,—for the London market only :

A very small quantity of herrings :

A few dozens of worsted hose from Aberdeen :

Highland cattle,—the only article of value in the export from Scotland to England :

Besides the money that is spent by English youth at the several universities of Scotland.

I have not pretended to estimate the amount of these several articles, as any thing I could offer on that head would be purely conjectural.— But I imagine that either the first or the last article in the English list would alone balance all the articles from Scotland, or nearly so.

Any one who glances over this account, and observes what a vast proportion of the inhabitants of Scotland are constantly clothed almost entirely with one kind or other of these goods, and considers how much of the other articles are daily consumed in every family, will readily allow, that an equal number of the inhabitants of North America, who hardly take any other articles from England but cloathing and hardwares, cannot consume more of English manufactures than an equal number of the Scots do ; especially when he adverts, that in the populous province of New England, they have for more than thirty years past manufactured as many coarse cloths and hats *, as serve themselves, and several of the neighbouring provinces.

* [The note here referred to, is put at the bottom of the following page.]

From

From these premisses I conclude, that the trade to Scotland
has

[This note is the one referred to in the preceding page.]

* In a letter addressed to the Lords Commissioners of Trade and Plantations, concerning the trade to New England, printed anno 1715, we find the following observations. "We have a very considerable manufactory *already established* in " *New England*, begun in the great scarcity and dearth of goods about nine years " ago, &c. — This put them upon making buttons, stuffs, kerseys, linsey-wool- " seys, flannels, &c. which has decreased the importation of those provinces a- " bove L. 50,000 *per annum*." Thus it appears, that the manufactures of New England were begun as early as the Union, and have gone on encreasing ever since.

The Lords Commissioners of Trade, in consequence of an order of the House of Commons, dated December 25. 1725, give the following account of the manufactures of the British colonies. "That in the colonies of *New England*,—*New York*,—*Connecticut*,—*Rhode island*,—*Pennsylvania*,—and in the county of *Somerset* in *Maryland*, the people had fallen into the manufacture of woollen and " linen cloth for the use of their own families, &c.

"The reason why these people had begun this manufacture were,—That the " product of those colonies being chiefly stock and grain, the estates of the inha- " bitants depended wholly upon farming; and as this could not be carried on " without a certain quantity of *sheep*, their wool would be utterly lost, were not " their servants employed at leisure-times of the year, but chiefly during the win- " ter, in manufacturing it for the use of their families, &c.

"There are more trades carried on, and manufactures set up, in the provinces " of the continent of *America*, to the northward of *Virginia*, prejudicial to the " trade and manufactures of *Great Britain*, particularly in *New England*, than in " any other of the British colonies: which is not to be wondered at; for their soil, " climate, and produce, being pretty near the same with ours, they have no " staple commodities of their own to exchange for our manufactures, which puts " them under the greater necessity, as well as greater temptation, of providing " themselves at home. To which may be added, *in the charter-governments*, the " little dependence they have upon their mother-country, and consequently the small re- " straints they are under in any matters detrimental to her interest."

Since that time these manufactures have been greatly improved, and other new ones established greatly to the prejudice of the trade of Great Britain; — particu-
larly

has been more beneficial to England since the union, than that to America has been *.

In consequence, however, of this daily losing traffic, Scotland is prevented from being so highly benefited by the other advantages she possesses, as might have been naturally expected. Her trade from Glasgow, and a few other places, to foreign parts, — and the return of a few of her numerous emigrants who have made fortunes in distant realms, have hitherto enabled her in some measure to preserve a sort of miserable existence in spite of these prodigious drains from her. — But, notwithstanding this, and the other shifts she has been forced to adopt, to help to stave off the evil day a little longer; — yet this universal consumption, if suffered to prey upon her vitals, must ere long prove fatal, un-

larly that of hats, — the materials for which they have at so easy a rate as to enable them to be manufactured 40 or 50 per cent. cheaper than they could be afforded at if brought from Britain; — and various manufactures of hardwares have been also established there. — Nor will it be possible to prevent these from encreasing, in whatever way the present contest may be ended. — So that it is high time for *Britain* to look to her own interest, — to strive to promote her own trade and manufactures at home as much as possible, — to endeavour to augment the number of her subjects at *home* to the utmost of her power, and not to pamper too much this haughty and froward child, who will never be led but with reluctance, and will one day prove the ruin of this state, if she does not in time provide for that separation that must sooner or later inevitably happen.

* The tobacco-trade, I am sensible, brings in a great revenue to government; and, by being re-exported, serves to enrich the merchants, and bring money from other nations into the state: so that it will be viewed by *ministers* and *merchants* as an inestimable branch of commerce. It is evident, however, that this trade tends but very little to promote the manufactures, or encourage the general industry, of this nation; so that it is much less beneficial to the state, than many other branches of trade, which afford far less considerable annual returns.

less

less some effectual remedy is applied : A remedy that is calculated to inspire life and vigour into all orders of people ; and not like those that have been hitherto attempted, that tend only to enrich a few at the expence of the many, and thus virtually to encrease instead of removing the disease.

In consequence of this fatal policy, the country begins to be deserted ; and, if it is persisted in, it must in a short time become little better than a desert waste : — and it deserves the serious attention of every inhabitant of England, to consider, whether it would be most for her interest, to have these inhabitants at her side, where they must continue to promote her manufactures, and add to her native internal vigour ; — or on the other side of the Atlantic, where there is less security for their continuing faithful to the parent state ; — and where, it is possible, they may ere long help them to throw off that allegiance to Britain which they seem to wear at present with so much reluctance.

It has been shown in the course of these letters, I hope, in a satisfactory manner, that a great part of Scotland has no other means left for bringing in money to herself, and consequently for enabling her to continue a customer to England, nearly so efficacious, as the plan recommended for promoting the growth of wool, and the woollen manufacture, in Scotland ; — and that therefore it is the interest of England as much as of Scotland, that that plan should be adopted.

It is not indeed to be doubted, that it would be more for the interest of England, if Scotland could continue to take all her manufactures from England, without having any manufactures of her own. — But as it is impossible for a spring to continue to flow
I
constantly,

constantly, unless it be continually fed with abundant moisture ; so it is equally impossible for one nation to continue to purchase the manufactures of another, unless it has some way of bringing money from other countries to pay for these manufactures. So long as Scotland has money, from the nature of things she must continue a constant customer to England for many of her manufactures, articles of luxury and superfluities, and must add to the glory, the strength, and security of the British empire : but if she be poor, she cannot be of almost any use in any of these respects : on the contrary, her nobles and other men of family without fortune, must become the dependents and tools of the court, and suck out the vitals, and in time tend to enslave that nation which it would otherwise be their interest and their glory to protect.

On these accounts I cannot imagine that any clear-sighted minister would dare to oppose the improvement of her manufactures, — or that a nation so justly jealous of preserving her valuable liberties to the latest posterity as England is, would concur with him in a step that would have such a natural tendency to sap the foundations of these liberties, should a minister be so daringly unjust as to avow such an intention. So long as the lower ranks of people are rich and independent in every corner of the state, its liberties rest upon the firmest basis that human wisdom can invent ; but when they become indigent, and of course spiritless, and dependent, the liberties of that state are but on a tottering foundation. Ye patriots, therefore, — ye genuine and unaffected patriots, who wish to hand down to the latest posterity those unequalled blessings that you now enjoy, watch with an eagle eye over every province of the realm ; — Protect the poor ; — Raise them from their low estate ; — Let them feel what it is to *possess*,

and they will know how to *defend*.—— These are your friends, these your only allies upon whom you may at all times firmly rely. Cherish them as the apple of thine eye; and be assured, that when you do so, you are not fostering an insidious rival, but a brother, who will be ready to share in all your dangers; — who will add to your strength, and by mutual offices of friendly kindness, promote your happiness, security, and peace.

You cannot but have already remarked, that as England has already lost a great part of her trade for fine cloths to many parts of the world, in consequence of having lost her fine wool, and runs a great risk of losing that share of it which still remains; if she continues to depend on Spain for that necessary article, it becomes necessary to look around her to try if she can obtain it elsewhere at a more moderate rate.—— From the present political situation of England, there is but little hope that ever she could regain such a pre-eminence in rearing fine wool as she once enjoyed. But every thing concurs at present to favour the attempt in Scotland; and should it succeed, there is no doubt but that Britain might again recover that pre-eminence in the woollen manufacture she once possessed.—— For as there is no other kingdom in Europe, except Spain, that could produce such fine wool as might be reared in Scotland, the manufacturers of other nations would be under the necessity of resorting to Spain, or more distant countries, for that necessary article, which we could have within our own island; which would give us such an advantage over them in this respect as would ensure the prosperity of this branch of our manufacture.—— In this view, therefore, it is greatly the interest of the state to promote the plan for improving our wool above recommended.

Having thus endeavoured to obviate all the objections you have made to the proposed plan for improving the wool in this country, I am willing to believe that you will rest satisfied in the opinion that it may with safety be attempted ; and that the attempt will probably be attended with success, and prove in the end highly beneficial to the nation in general, and to this corner of it in particular.

You say you are convinced, that if this great point could be fully effected, there would be no difficulty in establishing the woollen manufacture in Scotland upon a firm and lasting basis.— But in that event you ask, “ What would become of the linen manufacture ? would I wish that it should be given up entirely throughout all the kingdom, and the woollen manufacture be established every where in its stead ? ”—— By no means. — Such rash counsels are always attended with danger.—— Wisdom acts with caution in all cases ; — and experience tells us, that great and sudden changes in the manufactures of any nation are usually attended with very calamitous consequences to numbers of industrious labourers, whose families are ruined, and their hopes entirely blasted, by such unwise counsels. Far, therefore, be such an idea from entering into my imagination.

Although I do not think it will admit of a doubt, that the woollen manufacture is, upon the whole, much better adapted to the state of this country, and the nature of our climate *, than the linen,

* It has been demonstrated, that the climate of Britain, in consequence of her insular situation, and the peculiarities that result from thence, is calculated for rearing better wool than can be produced in a continental climate. But the case is directly the reverse with regard to the rearing or manufacturing flax : the stea-

linen, and may therefore be carried on in most places of it with greater profit; — yet there are some particular places where the people have now acquired such an adroitness in the linen manufacture, as could not be attained but by long practice; and where the soil is so favourable for rearing flax, as gives much room to hope that this manufacture might be carried on there with success, were a due attention bestowed upon the encouraging of it there. Hitherto the trustees for the improvement of manufactures, &c. in Scotland, by grasping at too much, have been able to accomplish little. — They have endeavoured to establish the linen manufacture in every corner at once; and by thus attempting to divide their favours equally to all, they have not been able effectually to serve any. But if they should confine their views to a few of the places that are most favourably situated for carrying on that manufacture, and should continue to support them by a warm and uninterrupted exertion, till things were put upon a right footing, and the manufacture set fairly agoing, there is no reason to fear but the linen manufacture might come at length to flourish in these places abundantly. Two or three years ago I wrote some letters on this subject, which were published in the Weekly Magazine also, under the signature of *Agricola*, (a copy of which I have obtained for you, and send along with this), to which I must refer you for farther satisfaction on this head, if you are desirous of it; — for I am already sufficiently tired with this subject. — I am, &c.

diness of season peculiar to continental countries, being much better calculated for all the operations on flax, than that variableness of weather that necessarily results from our insular situation, which puts it out of our power to obtain, to a critical accuracy, the precise degree of perfection, either for pulling, watering, or grafting our flax; so that it is impossible either to rear the flax so cheap, or to be certain of having the filament so equally strong and firm, as may with ease be obtained on the continent.

O B S E R V A T I O N S

O N

N A T I O N A L I N D U S T R Y.

L E T T E R F I F T E E N T H.

C O N T E N T S.

Introduction.—*A retrospective view of the causes which have prevented the progress of manufactures and useful arts in Scotland.*
—*Unhappy consequences that have resulted from thence.*—*Greater ills that may be dreaded.*—*Arguments to induce men of influence to ward off the threatened calamities.*—*The prosperity of those in high rank depends upon the riches of those in lower station.*
—*Illustrated by various arguments;—by the example of Spain.*
—*Striking contrast between the ancient and present state of that kingdom.*—*What are the steps necessary to be taken for effectually exciting a spirit of industry among the lower ranks of people.*—*Necessity of doing this before any effectual improvement can take place.*—*Folly and injustice of complaining of the indolence and other bad qualities of the poor;—it reflects disgrace upon the complainers.*—*The efforts of gentlemen in Scotland for improving the country, have been hitherto in general improperly directed,—and therefore unsuccessful.*—*Compulsatory statutes, however seemingly favourable to arts and manufactures, usually do harm;—and why.*—*In what manner men of high rank may most effectually co-operate in forwarding useful arts and manufactures.*—*Objection to the plan proposed for breeding numerous flocks of sheep in Scotland.*—*Want of a proper market.*—*Answer.*—*England would become a much better and more certain market for sheep, than for cattle, from Scotland;—and why.*—*Sheep a much less hazardous stock than cattle;—and how.*—*The gentlemen of Scotland ought to endeavour to get liberty to export wool from that country.*



OBSERVATIONS

ON

NATIONAL INDUSTRY.

LETTER FIFTEENTH.

To Mr ***** London.

December 10. 1775.

I Thank you, kind Sir, for the very liberal encomiums you have bestowed upon your humble servant.—Justice is painted blind.—Surely Friendship ought to be represented in the same manner; for I know nothing that has such a tendency to mislead the understanding as this tender connection. I thank you for this fresh proof of your kind partiality.

You

You think the arguments already produced, prove, in a satisfactory manner, that Scotland is peculiarly well calculated for the woollen manufacture; and that it is so plainly the interest of every man of property in Scotland to enter warmly into the scheme proposed for encouraging it, that nothing more is necessary to cause it be adopted than to make it generally known.—As to the last part, at least, my hopes are far from being so sanguine as yours.—No stranger to the world, I am far from thinking, that reason alone is sufficient in most cases to sway mankind.—But waving this subject at present, I am now to inform you, that however strong the former arguments for inducing the gentlemen of Scotland to look around, and exert themselves in time, may seem to you, there are others, of a more touching nature, that might be adduced with a view to rouse them from their drowsy lethargy, should any one think it worth his while to attempt to do that. To amuse you with a little variety, I shall attempt to throw together some of these arguments into the form of an address to the nobility and gentlemen of landed property in Scotland;—which might run in the following strain, supposing they had been previously acquainted with the foregoing letters.

“THE many benefits that would accrue to Scotland from an increase of the number of sheep, and a due encouragement of the growth of fine wool here, have been already so clearly pointed out, and the uncommon advantages that this nation possesses above all others for carrying on the woollen manufacture with profit, hath been so fully demonstrated, that I hope few other arguments need be here produced to induce you all heartily to unite, and by one well-directed effort ensure to your country the many advantages that you would thus procure for it, and transmit

mit to your posterity that rich independence which must be its necessary attendant.

“ Scotland, long divided by internal factions, or struggling in an unequal contest with a much more powerful state for liberty and independence, was prevented from attending sufficiently to the progress of arts and manufactures, and from bestowing upon them those necessary encouragements that were adapted to inspire them with vigour, and make them keep pace with the improvements of their surrounding neighbours. At length, however, when she began to see the vast importance of these long-neglected arts, the seat of empire having been transferred to England, she became in some measure only a province of that more powerful state : her nobles were carried from their native seats ; and her great men, allured by the prospect of plenty, that must ever centre at the seat of empire, in a great measure deserted their native country, and thus effectually deprived it of the best means for recovering itself, and of enabling it to make a distinguished figure in the circle of commerce, of arts and manufactures.

“ And, as if Heaven in its wrath, not satisfied with these severe chastisements, had decreed her to drink still more deeply of the bitter cup of sorrow ; — when that race of princes whom she considered as in a peculiar manner her own native sovereigns, was forced to abandon a throne which they were judged unqualified properly to fill, many of her principal men having unfortunately sided with these princes, became sharers of their misfortunes ; so that the infant manufactures, which were then supported by the money or influence of these chiefs, being deprived of that resource, were involved in the same general ruin with their patrons and

supporters *. From these causes, while other nations were advancing in arts and industry, Scotland remained inactive, so as to be soon involved in that state of poverty which has so long prevented her from taking any vigorous step for regaining that influence and weight in the general scale of things that Nature has evidently intended for her.

“ Seldom, it is said, does one misfortune come unattended by others ; and never was the observation more exactly fulfilled than in the present case : for, in consequence of the general poverty of the country, and the necessary want of those agreeable conveniencies that other richer countries enjoy, it became so disagreeable to men who have got a taste of the elegant conveniencies of life, to reside in these melancholy provinces, where want and gloomy dejection do in general prevail, that they are forced, perhaps without intending it, to desert their native seats almost for ever ; and the dismal scenes that these afford, are so very ill adapted to the lively hopes of youthful fancy, that the children of the few that remain behind, sicken at the dreary prospect, and sigh for busier scenes in countries more remote. It is from this cause that our illustrious youth have no sooner obtained a competent education, than they fly to distant regions, and exhaust far from home that spirit and youthful vigour which ought to have enriched their native country.—Wo unto thee, O my country, for thou art fallen under the load of the most grievous of all curses ; for *the little that thou hast, is taken away from thee* ; and the portion which ought to have been thine, is given to another more rich and more powerful than thyself.

* This was in a particular manner the case with a manufacture of broad cloth that had been established at *New Mills* before the Revolution, which then was ruined entirely.

“ Long

“ Long hath this severest of all calamities that can befall a nation been suffered to pass unobserved. Where is the man who can say, that some of his dearest connections are not now far from the place where they could minister most effectually to his delight? Is there a mother who shall read this, or a father, who is not divested of paternal tenderness, whose tears will not bear witness to this melancholy truth, that their dearest hopes lie buried in distant plains, or that strangers alone enjoy those tender assiduities that they had a right to expect in their old age from the filial care of their own progeny?— Yet, where is the man who hath boldly advanced, and with the spirit of a father, of a friend to the widow, and of those that are in sore distress, hath stretched out his hand, and, like a guardian angel, endeavoured to ward off those grievous ills that threaten his descendents? Dejected and spiritless, all stand aloof, as if afraid to venture to begin the arduous undertaking.— But, of what are you afraid? Phantoms and Chimeras may affright, but nothing real can oppose thy steps.— Now is the favourable time for commencing this glorious undertaking; — and there are some just now who are able, — and seem to be willing, to achieve it.— Go on, then, with assured certainty of success.— Probe the wound to the bottom, if it admits not of a partial cure.— Go deep, — and deeper still; be not afraid. It is but a filthy ulcer that hath not yet affected the vital parts.— Half the trouble that has been bestowed in applying palliatives, would long ere now, by a manly boldness, have effected a radical cure.

“ Happily the symptoms have of late become so alarming, as to rouse the attention of every one, so as to make them watch the progress of this growing malady. While it only carried off our youth, and destroyed the fondest hopes of their parents, we re-

mained unmoved in a sort of melancholy stupor.—While our people were only dropping off one by one from every corner of the country, we seemed still insensible of the daily waste we thus sustained.—But when at last the old and infirm, the mother, with the helpless babe that hangs upon her breast, forgetting former friendships and connections, leave their native soil, and seek for refuge on another shore, we are roused from our lethargy, and are, I hope, preparing to free ourselves from the influence of that malady which has so long oppressed us. Happy will it be for Scotland, if, when these violent symptoms shall abate, the memory of them be not also forgot, and we return to our former state of indifference with regard to that fatal disorder, which, although it may be accidentally allayed at times, will still continue alive, unless some effectual cure is undertaken, and will in time burst forth with other and more alarming symptoms,

“There is no axiom in geometry more indisputable, than that the power, the influence, the very existence of the men of landed property, depends upon the well-being, the riches, the activity of those in the lower spheres of life. A man who is poor, can never pay a rent: a man who is dependent upon the will of another for his subsistence, can never be actuated by that energetic spirit which alone can stimulate to arduous undertakings.—If, therefore, you hope to thrive yourselves, strive to make your inferiors rich; and if you hope to make them rich, first make them independent. These, O ye nobles, and great men of the earth, are the only means of ensuring lasting felicity to yourselves, and riches and independence to your families.—Let this, therefore, be the object for which you strive; nor rest satisfied till you have finally attained it.—Your all — your independence is at stake; and ye — who know the difference that is betwixt the nerveless abasement of that dependent thing
which

which crawls upon the dust, and licks the courtier's feet, and the celestial energy of that mind, which, animated with a consciousness of independence, looks down on "low ambition, and the pride of kings *," can best compute the value of this blessing.— If, then, ye find your own minds warmed with that animating fire; if ye perceive, that by this means one man is more highly elevated above another, than that debased thing excels the beasts that graze the fields; does not your heart glow with rapt'rous gratitude to Heaven for having put it in thy power thus as it were to form a second intellectual creation! which hath thus enabled thee to blow into the torpid mind the vivifying breath, and to foster it with friendly care, till it gathers accumulated strength, and then bursts forth in great and daring actions like thine own? — Such are the natural sentiments of the noble mind.— But the selfish reptile, afraid lest others should excel itself, feels more delight in receiving that humiliating homage from its inferiors, which itself must give to others, than in any action of beneficence.— Never can the little mind forgive the superior virtues of one in lower rank.— Dependent itself, it wishes to abase all others to the same estate; and all its little plans can only tend to make itself still more contemptible, and its country more feeble and enervated.

"To such I wish not at all to speak; — their number is, I hope, but few.— To those of more enlarged mind and elevated sentiments, I must again repeat it, that the first step towards improvement, is to render all beneath them as easy in their circumstances, and as independent in mind, as possible. All essential improvements must ever be carried on by the lower ranks of

* Pope.

people;

people; — but a dependent mind will never attempt to make any improvement, nor be brought to adopt one however plainly it may be pointed out.—— Let your attention, therefore, be turned chiefly towards those in the lowest ranks in society; — free them not only from dependence on yourself, but protect them also from the rod of others.—— Cherish them in thy bosom with lenient tenderness, — they will soon abundantly requite you for all your pains. Instead of that stupid torpor that now renders them insensible even of kindness, their minds will be taught to glow with the warmest effusions of grateful esteem, (for gratitude is only to be met with in cultivated minds). Instead of that listless apathy, arising from a total suppression of hope and desire, which makes them at present alike neglectful of good offices, and regardless of the bad; — their minds, enlivened by hope and tender desires, will become feelingly alive and active, so as to be sensible of those delicate *stimuli* that actuate the cultivated mind, and from the influence of which alone proceed those glorious actions that so conspicuously elevate man above all the other creatures of God.

Shakespeare, with that energetic propriety so eminently peculiar to himself, represents the great Lord Talbot as calling *himself* only the shadow of that mighty Talbot who made France tremble through all her regions, and pointing to his soldiers say,

These are his substance, sinews, arms, and strength,
With which he yoketh your rebellious necks;
Raseth your cities, and subverts your towns,
And in a moment makes them desolate.

But if a general, without his army, may, with any degree of
justice,

justice, be called a shadow without a substance, with still greater propriety may the inferior orders of the people upon the estate of a gentleman of landed property be called his *substance, sinews, arms, and strength*; for without these he becomes a mere ideal phantom,—a name without a substance.—His large possessions, and high-sounding titles, would, in that case, only serve to hold him up a little above the croud, to make him a more conspicuous object of derision and of public scorn.—Without money,—without influence, he becomes the abject tool of those who feed and clothe him: and, instead of defending the state by the vigour of his arm, or aiding it by the wisdom of his counsels, he sucks out the blood of the industrious poor, and thus drains his country of her vital energy and strength: nor has he any other object in view in the counsel he gives, but to devise new methods how he may gorge his ravenous maw, which, with insatiable appetite, is constantly crying, *Give, give*, so long as one poor drop remains to support his insignificant existence.

“Is there a man so totally lost to all sense of dignity as to be able to look upon this picture without feeling his mind glow with a mixture of pity and contempt for such an object.—Yet such must become the state of the descendants of every man of landed property in Scotland at no very distant period, unless you quickly exert yourselves to raise the poor and drooping objects who now drawl out a sort of vegetable existence on many of your estates.—While yet a small spark of vital warmth remains among them, make haste to cherish it.—By your well-directed care and timely attention, it may soon be made to glow with the most active energy. But if it shall be suffered to die away entirely, in vain shall your posterity attempt to revive it. They will even lose the desire themselves of attempting to do it. Beyond a certain point

point of abasement nations lose the power of recovering themselves.— From bad they continually descend to worse, till they at last are swallowed up by some more vigorous state, and suffer, not a reformation, but a total renovation.

“ We need not go to distant nations in search of an example of these important truths ; nor need we ascend to the fabulous æra of antiquity for facts to illustrate these assertions. Spain is at this moment little better than the ghost of a mighty empire, reduced to the very borders of perdition by this emaciating disease. Her life is not yet entirely gone ; but that existence is only known by those feeble emotions that denote her speedy departure.— Exhausted to a shadow, the little meagre blood she has left, scarce creeps along her veins ; and she is so entirely covered by those leeches, (a nobility and gentry divested of landed revenue), who have been suffered to seize upon her, that there is no room left to administer a remedy for her. It is these vermin alone that are alive and active, who greedily seize to themselves every drop of blood as it is slowly generated, so as effectually to prevent it from contributing towards the encrease of her real strength and vigour.

“ About two hundred years ago, Spain contained a numerous and active peasantry, who, by their vigorous industry, lived happy in the enjoyment of their own property ; and, being themselves in affluence, supported by their labour, with becoming dignity, a reputable body of independent nobility and gentry, whose many brilliant actions at that time afford the most striking contrast to their present abasement. But by a fortuitous concurrence of unlucky circumstances, the national industry received a check ; which having been disregarded at the time as insignificant

on account of the dazzling objects that then attracted the attention of all ranks of persons in that country, the *people* * gradually became poor, and were not able to afford the wonted returns to their superiors.—The nobles and gentry became of course more straitened in their circumstances than formerly, and by consequence more avaritious. The *poor*, instead of being seasonably relieved and supported, were more and more oppressed, till those who had any remains of spirit were forced to emigrate to other regions; and the few that remained, sunk at last into their present state of abject debility.—The grandees thus finding it impossible to draw a sufficient revenue from their estates, flocked to court, in hopes of obtaining those posts, or pensions, or lucrative monopolies, which the misguided court (a court necessarily misguided by the counsel of those who hoped to share in the spoils of their country) distributed with the most destructive liberality.

“ It is from this inattention to the *people*, and the pitiful system of selfish policy that has been adopted in consequence of it, that that mighty nation, which sent her victorious arms around the globe,—whose princes, intoxicated with power, and continued success, formed the ridiculous plan of universal monarchy, and made all the nations of Europe tremble for their tottering freedom,—is now dwindled into such total insignificance, as to be hardly in a condition to defend her own dominions against the poorest nation of Europe; and even with difficulty bears up against

* The word *people* admits of two meanings in modern languages, which occasions a sort of ambiguity. Sometimes it denotes the whole community, and is equivalent to the Latin *populus*; sometimes only the lower ranks, *plebs*. It is in the last sense it is here used; and in general this is the meaning of it when printed in Italics.

the African corsairs.—It is in consequence of this destructive policy, that we have lately seen the monarch of this once universally triumphant nation, obliged to descend to the humiliating meanness of disavowing his own orders, to avoid the dreaded indignation of the King of Britain *.—It is in consequence of this pitiful policy, that her nobles, instead of being actuated by that generous delirium which led to the most intrepid and disinterested actions, are now become the abject tools and humble sycophants of court,—the legal robbers of the state, and the most merciless oppressors of the poor.—And it is owing to the same system of short-sighted policy, that her gentry, formerly rich in the abundant revenue they enjoyed, and active in their several stations, are dwindled into the miserable *pantaloons*, the mere ghosts of departed dignity, which in listless inactivity dreams away its time in a solitary aping of mock royalty, and subsists upon the unsubstantial revenue of abundant rent-rolls long ago annihilated, which once were drawn from those now uncultivated fields over which he claims the undisputed superiority.

“Look upon this picture, all ye surrounding nations, and learn from her sad example to know upon what your own true felicity depends.

“*Discite justitiam, moriti, et non temnere — plebes.*

These lower orders of the people are the bees that collect the honey upon which the whole hive must be subsisted. If they are numerous, strong, and active; and if they have proper materials within their reach on which that activity may be exerted, abundance will be felt in every corner, and all ranks of citizens will be enabled to move in their several spheres with dignity and decorum.

* This refers to the affair of Falkland's island.

“Unfortunately

“Unfortunately the interests of these meaner classes of the people have been too little regarded in some parts of Scotland by our forefathers, which has sunk them to a degree of abasement far beneath the rank they ought to hold in a well-ordered state; which, instead of being viewed as their misfortune, has been too often imputed to them as a crime, and has drawn down upon them much contumely and unmerited abuse.

“To the man whose mind is liberally enlarged, these objects excite sensations of a very different sort. He knows, that although man is an animal naturally endowed with powerful *capabilities*, to adopt the word of a celebrated modern philologist, yet these may lie for ever dormant, unless he is placed on a stage proper for calling them forth to action; and it is by gradual steps, and slow, that he attains the power of exerting his mental faculties with *intense* vigour in any particular line. It was by a gradual ascent from the first self-evident axioms of geometry, and by the help of a series of propositions, at first simple, and adapted to an ordinary capacity, that the immortal Newton himself attained that pre-eminence in mathematical knowledge for which he is so justly admired. And it is by similar, though less gigantic strides, that every mind which is bemired in ignorance, must be initiated in knowledge, and gradually trained to vigour and energy.— If, therefore, we wish to avail ourselves of the generous faculties of the mind, we ought, first, to take care that these faculties be awakened.— To look for their fullest exertions without doing this, is nearly as ridiculous, as to expect that a blind man should distinguish colours, or a deaf man be transported with the tones of harmony.

“When a man can claim nothing as his property so long as he

is subjected to the power of another, who useth him as he thinks proper, that man enjoys only a mere animal existence. Humble and dependent, like his brother-spaniel, he licks the hand that strikes him. Without hope, he has no fear but for those stripes that seem to threaten to destroy his animal existence. But once grant him something that he can call his own; let him feel that the enjoyment of this *peculium*, however small, cannot be taken from him; and that he needs not dread the rapacious hand of the most powerful member of the state,— he quickly feels himself emerge into a state mental existence. — Hope begins to warm his bosom, which generates awakening solicitude, and tender desires.—To avoid the dreaded ills, and attain the hoped-for bliss, he is induced to exert his faculties with vigour.—These exertions often repeated, beget a habit of industry.—Industry naturally procures wealth.—Wealth obtains the necessaries that tend to invigorate the body and fortify the mind. It produces a spirit of independence; and a spirit of independence inspires generous sensations, that produce those noble exertions which proclaim man the lord of all the other creatures on this globe, and exalt him to a superior rank, allied to celestial intelligences.

“Such is the natural progress of the human mind, from its lowest state of abasement to its highest exaltation; and it is as vain to expect the last without these gradual preparatory steps, as to expect that the everlasting mountains will be moved from their places by the insignificant workings of the mole.

“If then it cannot be denied, that all the essential improvements of a country must be carried on among the lower ranks of people, and if no vigorous exertion can be expected from them while they continue in a weak and dependent state, it will necessarily follow,

follow, that every attempt at improvement which does not rest upon this circumstance as its basis, must be vain and illufory. — Let no one, therefore, deceive himfelf with the vain hope of ever being highly benefited by the exertions of thofe who depend merely on his favour for fubfiftence. Such perfons can never rife above the reptile ftate. There is not a truth within the reach of human knowledge more demonftrably certain, than that no man ever yet drew the greateft poffible revenue that could be afforded from his demefnes, if there was but one perfon under him who would tamely crouch to the rod of power, or fuffer himfelf to be trod upon by the proudeft HE that e'er fet foot on earth ; and the lofs that is thus fufained by the proprietor, will be in general exactly in proportion to the diftance that his people are from this ftate of perfect independent fecurity. — Let all your endeavours then, I cannot too often repeat it, be exerted to procure for them this fundamental bleffing ; and when this is once obtained, all the other bleffings you would wifh for will quickly follow. — Nor will this prove either an arduous or unpleafing task. — At firft, indeed, they will ftand in need of your parental tendernefs, to guard and protect them from the attacks of others ; — but foon fhall they acquire fuch ftrength and internal vigour, as to be able of themfelves to repel the attacks of all invaders.

Fostered thus,

The craddled hero gains from female care
His future vigour : but, that vigour felt,
He fprings indignant from his nurfe's arms ;
He nods the plummy creft, he fhakes the fpear,
And is that awful thing which Heav'n ordain'd
The fcourge of tyrants, and his country's pride*.

* Maſon.

“ The

“The obstinacy, the perverseness, the insidious cunning, the malevolent wickedness of the lower ranks of people, furnish too often a theme for abuse, and are frequently employed as arguments for crushing and maltreating them. But these very passions, of which you perhaps with justice complain, are the natural and necessary effects of weakness and imbecility, and must be encreased by every exertion of tyrannical power.—One who feels that he is unable to cope with another in an open and man-like contention, is obliged in self-defence to have recourse to the low and insidious arts of cunning and of fly evasion. Envy and malice arise from a sense of injury, which our own imbecility prevented us from chastising in a proper manner when it was felt; and all the other low and malevolent affections in like manner take their rise from conscious weakness in man. The more, therefore, he is oppressed, the more must these detestable vices abound.—If these, therefore, are offensive to you, remove the cause, and the effects will quickly cease.—Instead of an abject slave, make the man of whom you complain, an independent active being, and you remove the cause of all his former meanness:—you enable him to vindicate his own rights with open candour, instead of insidious cunning;—you elevate him above the necessity of having recourse to mean evasive subtleties, which he now looks down upon with that contempt they justly merit. But if you first depress him to such a pitch of abasement as makes these vices necessary, and then punish him for being possessed of what you have taken so much pains to implant into his mind,—what name is it possible to invent that shall be bad enough to characterise such a species of tyranny? Yet how many millions of our fellow-creatures, endowed with souls that could have glowed with the most celestial ardour, are at this moment groaning beneath the merciless rod of their brutal oppressors,—and yet these

these unjust oppressors have the daring effrontery to lift up their head, and with impious boldness appeal to the impartial justice of Heaven for the necessity they are under of treating them thus, to eradicate the vices with which their own merciless cruelty hath debased the likenesses of the Divinity originally stamped upon the mind of all mankind !

“ Leave then to the despots of other regions the guilt of such aggravated crimes, and let them not once be named in this land of happiness and freedom.—Complain no more of the ignorance or wickedness of your dependents, if you wish to conceal your own shame, or wipe off a stain from the memory of your forefathers ; —for these are vices that spring only from weakness and dependence. If they are dependent on you, give them proper security ; —if they are rendered weak by your superior power, remove the rod from above them, and only wield it to guard them from the attacks of others.—Soon shall all these vices disappear, and you shall have the pleasure of finding yourself placed above men who are in rank and dignity of station only inferior to yourselves ; and who, in candour of mind, and undisguised sincerity, are every way your equals.

“ I dwell upon this head, because of its exceeding great importance to the internal felicity of a state, and because it never seems to have obtained that degree of attention that its great importance requires in any political arrangements that have yet come to my knowledge. With regard to other animals, the necessity of attending to it is universally acknowledged ; and they are treated accordingly.—No man who wishes to obtain a prize in the race, will be so foolish as to expect that he will best succeed by starving or maltreating his horse. He knows it is by his *vigour* alone

alone that the prize can be obtained, and therefore he previously feeds and cherishes him with the most invigorating food, so as to inspire him with that generous ardour that can alone carry him in triumph to the goal. But by a capricious perverseness of reasoning, man seems to expect from man exertions, vigorous in proportion to his natural debility. When his faculties are impaired for want of proper nutriment, how shall they be recruited but by lenity and fostering care? But if, instead of that, his little pittance is rendered still more scanty; and if he is pushed to make exertions equal to those in high plight and vigour, he may die beneath the rod, but that is all that needs be expected from him.

“ Let me, therefore, entreat you all, all of you who wish to secure riches and independence to yourselves and your posterity, to attend in time to this great and important object. Instead of spending your time in futile attempts to ascertain the value of your soil, or unavailing efforts to improve your fields, turn your attention to improve your people; for no sooner shall this be done, than your fields will be effectually improved without any efforts on your part.— Instead of employing empirical theorists to ascertain the value of your farms, and put an imaginary rent upon them, which never can be realised so long as your people continue in their present state, consult those who are best acquainted with the weaknesses and wants of these people, and apply the remedies that are best adapted to remove them: for I must again repeat it, your revenues never will depend so much either upon the richness of your soil, or the convenience of its situation, as upon the richness, the independence, and internal vigour of its inhabitants.

“ Nothing is more common, than to see gentlemen in Scotland
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carrying on improvements in agriculture, often with little pleasure, and still less profit to themselves, merely with a view to serve as a lesson to their tenants and dependents, hoping that this alone will induce them to follow their example. These hopes, however, are nearly as well founded, as those of the man, who, instead of feeding his horse with nourishing food, would think he would be rendered fit for the race, merely by making another horse, who had been properly fed and duly trained regularly, perform his exercises and wanton gambols before him. For want of internal vigour, the enfeebled animal either looks on, an unconcerned spectator; or if he attempts to follow the career, his strength is exhausted before he has attained the mid course, and remains behind weaker and more feeble than before.—These gentlemen do not seem to consider, that if ever a farmer who is in poor and abject circumstances, is to make improvements in agriculture, it must be by steps altogether dissimilar to those that are practised by his landlord.—He must first reap profit from some *little* articles that are perhaps entirely overlooked by the great improver, before he can attempt to go forward.—His mind must be cheered with these small profits, and enlivened by the hopes of greater, before he will begin to argue with freedom, or to observe with accuracy: but, above all, he must have an absolute certainty, that he shall be able to reap the full profit of his labour, in spite of the efforts of any one to deprive him of it;—for it is a full conviction of this alone that can ever excite to action. Without this perfect *security*, therefore, all attempts at improvement must be trifling and insignificant.

“ Without this security, even the most boundless generosity in the landlord would be vain. For should the tenant become rich by any accidental good fortune, he will search out any other way

of securing his money, rather than employ it in improving a field, the profits of which he thinks may possibly be reaped by another, even where that is but a bare possibility.—He will even bury his talent in the ground, so as to preserve it, rather than employ it in that way.—For this reason, the man who has encreased his own small stock a little by his industry, is more to be prized as a tenant, and will in proper circumstances exert himself more, than one who has obtained a much larger sum by any other means.

“ Unbounded generosity, therefore, in a proprietor in furnishing his tenants with money, will alone be as little efficacious in promoting improvements as his own example.—A little pecuniary assistance, *in proper circumstances*, may be of very great utility ;—but unless in these circumstances it can be of no service.

“ And if improvements in agriculture so necessarily depend upon the security and well-being of the lower ranks, and can be so little promoted by the efforts of those in higher station to perfect them,—it is equally certain, that other mechanical arts admit of as little improvement by the one, and stand as much in need of the assistance of the other, as it does.

“ When men are very keen in the pursuit of any one object, that extraordinary degree of eagerness very often makes them adopt measures that rather tend to retard than to forward the plan they had in view ; from which cause it has happened, that few manufactures that have been generally considered as great objects of national concern before they were established, have ever succeeded according to expectation.

“ For

“ For in these circumstances men of high rank and fortune, fired with the prospect of the innumerable advantages that they imagine would accrue from thence, and impatient of the delay that seems to be necessary on any other footing, associate themselves into companies, with a joint stock, for carrying on the particular branch of manufacture they have in view at the time; from which necessarily result multiplied abuses in the servants entrusted with the management of their affairs, and a consequent loss in trade, which ends at length in the total failure of the undertaking.

“ Before they engage in attempts of this sort, it would be well if men of superior rank would reflect, that it is impossible for them to attend themselves to all the *minutiæ* in the detail of practical arts that are necessary to ensure success in them; and that it is equally impossible to get servants who will bestow that attention to the management of another man's stock that he would do to his own. For these reasons the detail of practical arts ought on all occasions to be left to people in lower spheres, whose own capitals are employed, and whose prosperity in life depends upon their success;—for their ingenuity, whetted by the prospect of gain, will make many discoveries of capital importance to themselves, and their activity will be increased to that degree which only can ensure success in any manual art. To these, therefore, it ought always to be left.

“ But if it be difficult for *gentlemen* of ordinary station to acquire a perfect knowledge of the detail of mechanical arts, it is surely more difficult still for ministers of state, and others in the highest departments of civil affairs, to attain a perfect knowledge of these *minutiæ*; so that when they assume to themselves a sort of

dictatorial power, and prescribe positive rules for regulating the practice of individuals, they descend from their own sphere, and enter upon another, in which it is impossible they can have a sufficient degree of knowledge to be certain that they are acting with propriety; so that they frequently do hurt to the particular art they mean to encourage. The schemes which to their imagination appear fraught with the most salutary influences, may in general be compared to that of a man, who having, by accident, discovered that no other plant afforded so much honey as the perennial red clover, should take it into his head to fill all his fields with this plant, and to extirpate all other plants from that neighbourhood, and then should purchase innumerable bee-hives to pasture upon the plentiful food he had provided for them, in the full persuasion that he would accumulate an immense treasure by this his wise forecast:—but, behold, when the season arrives in which he should gather his honey, to his utter astonishment he discovers, that the bees are all dead, and their cells entirely empty.

“To complete the parallel, this disappointed schemer should complain of the determinate obstinacy of these pertinacious animals, who, from a wilful perverseness of disposition, refused to taste a morsel of that delicious food that he had provided for them, but had wilfully starved themselves, that he might be ruined by their failure. It is not perhaps till long after he has vented his spleen in this manner, that some man of sober understanding ventures to tell him, that although he had indeed provided as much honey as might have been sufficient to sustain a much larger number of bees than had been put upon it; yet as the proboscis of the bee was not of sufficient length to reach the bottom of the cup in which honey was contained, (the nectarium of that flower), the poor

poor animals were absolutely starved for want of food, in spite of their utmost endeavours to reach it. His eyes are in consequence of this discovery opened at last; and he sees, when too late, that his favourite scheme has miscarried merely through his own ignorance and presumptuous folly.

“It is not common to hear mere animals accused of such a crime as that here specified; but as if man were more stupid, as well as more malevolent, than any of these, he is often accused of such absurd acts of malevolence and folly. It is thus that Vanity and Pride offer incense at the shrine of *Power*, and emulously strive, often too successfully, to make her blind to the dictates of reason and common sense. In order to free her from the blame of having committed a mistake, *Humanity* is accused of a crime contrary to the established order of things. But there can be no doubt but that man, as well as every other animal, must in general pursue that line of conduct that promises most effectually to contribute towards his own felicity, and to preserve his life as long as possible.

“Instead of this supercilious self-conceit, it would argue a greater degree of understanding, if they would rest satisfied, that people in the lower spheres of life were much more capable than any others, of discovering what would most immediately promote their own interest, and what would be the most effectual means of prosecuting it, than those in more exalted stations could possibly do: for a very moderate degree of attention will enable any one to discover, that some persons in the lowest spheres of life, earn a comfortable subsistence to themselves and families, by following employments that the *pert* political arithmetician would, without hesitation, demonstrate could not be carried on without loss; while

while other persons shall be irretrievably ruined by following other employments, which, according to his *infallible* calculations, could not possibly fail to enrich them in a very short space of time.

“ Since such is the uncertainty of political arithmetic, those who have no other rule by which they may be directed in their schemes of improvement, ought surely to proceed with a very great degree of cautious diffidence.

“ On these principles it seems evident, that men of high rank, and extensive property, will most effectually advance their own interest, and that of the country in general, by encouraging arts and manufactures *through the medium of others*; and that their efforts will ever prove abortive when they attempt to engage in these employments *directly* on their own account.— Their chief business, therefore, ought to be, to endeavour to discover *bars* that lie in the way of improvements,— to smooth difficulties,— to remove obstructions,— and to prevent impositions and frauds of every sort. To become the protector of the weak, and the supporter of the indigent, are desirable offices; — offices that well befit the man of elevated rank and distinguished fortune; and these are all the offices that fall to his share in a well-ordered society.— By pursuing that line of conduct, he moves with becoming dignity, and at the same time in the most effectual manner promotes the general prosperity of the state, and by consequence his own immediate interest. When he attempts to do more, he usually deranges the political œconomy to such a degree by his violent exertions, as is productive of much harm instead of the good that he intended.— The reply of one of the deputies from a manufacturing town in France to Mr Colbert, when he insisted

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to know what restrictive regulations he should make most effectually to promote the interest of the particular manufactures in that town, was so liberal and judicious as deserves to be engraved in letters of gold. *Leave us*, said this just and liberal-minded manufacturer, *leave us to ourselves: we need no compulsive laws to induce us to pursue our own interest; the interest of no one needs be sacrificed for our convenience; and we only wish that our efforts to benefit ourselves may not be cramped by any undue preference being given to others.* This is all that the lower ranks of persons ought to require; and these are all the offices that the higher orders of the state ought ever to attempt.

“ To encourage the growth of fine wool by proper premiums for a time, will be removing a bar to the improvement of the country that far exceeds the power of the lower rank of people to perform of themselves.— To encourage industrious manufacturers to settle in proper parts of the country, and to support them till they shall be thoroughly established in trade; — To establish proper markets and marts in convenient parts of the country, and to encourage people to resort to these by judicious rewards, and continued attention, for a time, till they can go on of themselves; — To take care that the rude materials for manufactures may always be obtained at a reasonable price; — To guard against an excessive rise in the price of provisions and other indispensable necessities of life; — To form roads, and open proper channels of communication, between one part of the country and another; — and to see that the inhabitants be not cramped by any restrictive laws, — are perhaps all the encouragement that ever ought to be given to any country by the public.— But these particulars in a state beginning to improve, ought to be attended to with the most sedulous care.— It belongs to private individuals

duals to avoid cramping their own dependents by unreasonable restraints or exactions, and to protect them from these hindrances from others. And if all these particulars are attended to, it will soon be found, that the *people* are neither slow to perceive, nor negligent in adopting, those plans that will most effectually promote their own interest. But if these primary objects are not attended to, no considerable improvement can ever be expected to take place.

“ These general observations are alike applicable to all cases.— But I would now wish to turn your attention particularly to the improvement chiefly recommended in the foregoing sheets, that of encreasing the number of sheep, and of establishing the woollen manufacture in Scotland.

“ The only objection of seeming importance that occurs to me that could be made to rearing sheep in the Highlands of Scotland is, that there would not perhaps be a ready market for this encreased number of sheep, and that therefore their carcases would become of little value to the farmer.

“ There is no room to doubt, that should the number of sheep be very much augmented, the price of mutton would become lower in Scotland than it is at present.— But Nature here, as in almost every case when left to herself, provides a remedy along with the disease.

“ On account of the high price of mutton in England for a century past, the natives have been in the practice of rearing that species of stock for themselves.— But if, in consequence of the plan recommended, sheep should become very numerous in Scotland,

land, it would soon be found that they could be bought cheaper in that country, and driven to England, than they could be reared there; in consequence of which, the breeding of sheep in England would be given up as an unprofitable trade, and the English would depend upon Scotland in a great measure for lean sheep, as they at present depend upon it for lean cattle.—This would open a great and growing market for sheep, which would become an important article of commerce.

“ I call it a growing market : — for as the English farmers at present find it greatly their profit to bring their mutton as early to the shambles as possible, the greatest part of their sheep are hastily fattened up, and slaughtered between one and two years old; at which age the mutton is so bad, as not to be eatable by any person who has ever been accustomed to taste ripe mutton. But as the wool would be an article of greater value to the Scots farmer in proportion to the carcase, he would naturally keep his sheep to a greater age before he offered them to sale; and as these would require to be afterwards fattened in England, they could hardly in any case be brought to the shambles before they were of a proper age; and, by consequence, the mutton would be superlatively excellent.— It would be some time before this would come to be generally known; but as that kind of mutton came gradually to be more common in the English market, the inhabitants would perceive the difference, and prize it accordingly; which would bring it into such request, as to banish the present English mutton almost entirely. For there is no room to doubt, that any person who has been once accustomed to eat mutton of a proper age, would never be prevailed with to eat young mutton through choice any more.— This circumstance could not fail to

give the Scots mutton such a vogue as to secure for it a constant and steady market through all England.

“ On this account the demand for sheep to England would in a short time become much more considerable, and much more steady, than it is at present for black cattle; because the superiority of Scots mutton over English would be infinitely greater than that of Scots beef ever can be over English beef: — A superiority which is perhaps in some cases at present more imaginary than real, and which undoubtedly might be easily reduced to nothing in a short time by a due attention to their breed of cattle. But the English could never rival the Scots mutton, except by keeping their sheep to a proper age; which they could not possibly afford to do in the rich feeding counties of England. This, therefore, indicates another very manifest advantage that would accrue to Scotland in breeding sheep instead of black cattle.

“ But there still remains one other argument in favour of sheep-rearing in the Highlands of Scotland above cattle, which is of such importance, as ought to be alone sufficient to overbalance a myriad of objections, could any such be found: that is, the security that the owner of flocks possesses over that of the owner of herds of cattle. I now allude to the disease among the horned cattle; — a disease which has hitherto baffled all attempts to cure it where it has once taken place, — and which may be spread through a whole kingdom by such a trifling circumstance, as ought to make every man whose property consists entirely in cattle to tremble for his safety. — Hitherto, indeed, by the merciful providence of Heaven, and the parental care of our gracious Sovereign, this grievous pestilence has not found access into Scotland; but should it once get footing there, who can describe the
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ruin that must ensue? — Every individual in the Highlands would be stripped of all his property, and absolute and total depopulation must inevitably be the consequence. — The prospect is so alarmingly dreadful as needs but to be named; and I am sensible that there is not an inhabitant of these countries who shall read this, and who shall likewise seriously attend to the facts below, who will not shudder with horror at the prospect, — and bless Heaven, which hath hitherto preserved him from such unavoidable ruin as must have overwhelmed him, should that pestilence have visited his native country*.

“ Is

* MR URBAN,

Rotterdam, November 14. 1769.

Ever since the year 1740, the distemper among the horned cattle has been lurking in these provinces; in that and the following year it raged with more violence than now. From 1761 to 1767 it was scarce perceptible; but in May 1768, it appeared in the provinces of Overijssel and Guelderland, and spread with great rapidity. At Nymwegen best beef was sold at 14 d. per lb.

At Daventer, in the town-fields, were grazing in the spring of the present year at least 900 cows and oxen; the plague swept away in June and July between 500 and 600 of them: every method was tried for putting a stop to its progress, but without effect. A poor widow, in the decline of life, with eight children to provide for, having fifty-nine milch cows, by which she supported herself and family, has now only ten left, and those not yet out of danger. Numbers in these provinces are in the same unhappy situation. But what is still more dreadful, and hardly to be credited in a Christian country, villains make a practice in the night, of cutting off the udders of those cows that the plague has left; no less than twenty-six were so served in one night. — I am, &c.

V — T.

S I R,

Rotterdam, December 17. 1769.

In my last I promised you a more ample account of the progress of the distemper among the horned cattle in our provinces, and in this I shall fulfill that promise, by sending you a perfect list, according to the returns given in by order of the

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magistracy,

“Is it wise in a man to sleep secure upon the very edge of a precipice, over which the slightest accident, almost a breath of wind, may precipitate him in a moment? — Is it not rather fit that he should

magistracy, to the end of September last, with some additional remarks. After the assembly of the states meet, what further occurs worth communicating, shall be transmitted by,

Sir, Yours, &c.

V—T.

A LIST, shewing the state of the distemper among the Horned Cattle, in the districts of South and North Holland, in the month of September 1769.

SOUTH QUARTER, or Province of HOLLAND PROPERLY.

<i>Districts.</i>	<i>Alive in April.</i>	<i>Sick.</i>	<i>Died of the Sick-ness.</i>	<i>Recovered.</i>	<i>In Health.</i>
Amsterdam -	8740	5786	4919	816	2954
Brielle -	3775	2426	1607	483	1349
Delft -	10669	3868	2390	690	6801
Dordt -	2202	889	552	141	1313
Gornichem -	1926	733	508	149	1193
Gouda, or Tergou	9527	5679	4193	1142	3848
Haarlem -	4062	1523	1087	326	2539
Leyden -	9131	3906	2642	941	5225
Rotterdam -	784	344	231	47	440
S'Hage, or Hague	381	151	111	25	230
Schiedam -	4516	2251	1612	326	2265
Schoonhoven -	4613	1699	1231	282	2914
	60326	29255	21083	5368	31071

N. B. Every town here specified (in alphabetical order) have each of them their *Ambagt*, which denotes as far as their power of criminal justice reaches, although the lands are in property of their owners or occupiers. Every town also has its own lands or fields, which are let by leases to several farmers; though some possessors of land, paying land-tax, do rent them to boot.

NORTH

should *up and be doing* yet while he has it in his power to save himself? Sheep are liable to some disasters, but these with care and attention may be in a great measure guarded against. He who

NORTH HOLLAND, or WEST FRIESLAND.

<i>Recovered</i>	<i>Cattle old and young</i>	<i>Yet sick</i>	<i>Grown sick</i>	<i>Dead</i>	<i>In health</i>
5037	41664	2331	19288	11824	22376

Thus from April to August 1769, both inclusive, being five months,					
In the South Quarter,	Got through the disease	5368	Died of it	-	21083
In the North Quarter,	—————	5037	—————		11824
		10405			32907

I have been informed, that the poor, who have bought the beef of some of the infected beasts at a cheap rate, with a design to preserve it for winter-provisions, have been grievously disappointed: for after salting it, and putting it up in barrels, as their custom is, they have been obliged to throw it away, having turned as black as a coal in the pickle, without taking salt. By this misfortune the distresses of the poor have been aggravated, as provisions of all kinds are now immoderately dear.

Last week I saw a milch cow that had recovered from the distemper sold for a hundred and fifty florins. The farmer who purchased it, paid the money with pleasure, with a view of recruiting his stock; having, out of thirty beasts grazing in his fields in July last, only one ox, one milch cow, and three calves, left; the rest having died of the plague.

Judge what a price provisions must be at. Butter has been sold for forty florins the firkin of 80 lb. wt.; veal sells from eight to twelve stivers a pound; good beef at five stivers; pork one fourth dearer than usual; and a pint of milk at two stivers.

I am told, that at the Hague, the cowkeepers are almost all ruined, notwithstanding this advanced price, as their cattle are kept in stalls, and when the infection begins, the udder grows dry, the cow loaths her food, and, unless she recovers, can never be brought to eat.

I have seen several opened that have died of the infection. Their flesh appears found,

who is possessed of them, therefore, may rest in reasonable security.—But those whose all depends upon cattle, may be irretrievably ruined in a moment without the possibility of any relief.

“Ye gentlemen of landed property in these countries, your all depends upon the animals that graze the fields, can you sit still unconcerned, and not endeavour to secure to yourselves a moral certainty of something for your posterity? If the cattle are swept away, where are you? Sheep offer themselves as a most valuable surety, and as the only one which your situation admits of.

“One circumstance, and only one, remains to make the projected plan for improving Scotland by means of sheep and the woollen manufacture complete; and that is, to obtain a repeal of the destructive law preventing the exportation of wool. Whether it

found, fresh, and of a good colour; but the intrails much inflamed; the liver coal-black, the lungs inflated with watery bladders, and the throat imposthumated, and covered with putrid spots.

A premium of ten thousand guilders has been offered by the States-General to the person who shall discover a remedy; but though it is now more than eight months since this reward was published, it has not yet been obtained. Many quacks, it is true, have put in their claims, by pretended cures, that when brought to the test have been found unsuccessful.

I am sorry to say, that this plague has shewn itself in the province of Zealand, on the island of Tor Goes, Noord Beveland, and in Brabant, Staat Vlanderen, notwithstanding the precautions taken by Prince Charles, and the placards made and published at Bruffels.

You may learn by this true representation, how happy your island is to be so far separated from the infection, as not to be within its reach. The misery it has occasioned here, is not to be expressed; and if it should please God to continue this severe visitation much longer, an universal bankruptcy amongst our boors must ensue. *Gentleman's Magazine.*

will

will be possible at once to overcome popular prejudices so far as to get it repealed, I think extremely doubtful ; but every well-wisher of Britain ought to exert himself to undeceive the members of the supreme legislative council in this respect, as the well-being of millions depends upon it *."

These, my dear Sir, are some of the arguments that might be employed for inducing the gentlemen in Scotland heartily to concur in the plan proposed, or in some other equally efficacious for improving it.—I have great doubt, however, if, in the present situation of affairs, these, or any other arguments, would be sufficient to induce the generality of the nation to believe, that their own interest could only be effectually promoted by forwarding the interest of others in the first place. If their own fruitless efforts to benefit themselves by any other plan does not convince them,—no arguments of mine could ever be sufficient for that purpose.—I shall examine the other particulars you mention in my next.

* It would seem, if the Scots members were serious in insisting to repeal this law, that the English members in general would not much oppose it as to Scotland, for these reasons.

In the first place, the English will not in general allow, that it is possible to produce as fine wool in Scotland as in England ; — therefore the exportation of Scots wool would not tend to hurt the English woollen manufacture.

And, in the second place, if, according to the prevailing mode of reasoning, they should believe that the price of wool would be raised, if it were allowed to be exported, it would follow, that the Scots wool by that means would become much dearer than English wool of the same quality, which would effectually prevent the establishment of the woollen manufacture in Scotland, and thus prevent her from ever becoming the rival of the English. — By which mode of reasoning all the partial favourers of the monopoly of the English woollen manufacture would favour the bill. — I would be willing thus to employ their prejudices for forwarding the interest of the public.

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will be possible in order to overcome the difficulties
to be met in the future. It is requested that the
Board of Directors of the National Association of
the American People be kept advised of the progress
of the various projects.

There have been some changes in the
organization of the National Association of the
American People since the last meeting. The
Board of Directors has been re-elected and
the various committees have been re-appointed.
The interest of others in the work of the
Association has been increasing and the
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O B S E R V A T I O N S

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N A T I O N A L I N D U S T R Y.

L E T T E R S I X T E E N T H.

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C O N T E N T S.

Observations on entails.—This mode of transmitting heritage, though necessary under the Feodal aristocracy, is improper since a more equal system of legislation took place in Europe.—The improvement of Scotland has been much retarded by still retaining this barbarous mode of transmitting inheritance, which is alike destructive of the domestic happiness of private families, and the general prosperity of the state.—It ought therefore to be abolished;—or, at least, very much restricted.—The mode of trial in civil causes is less favourable to the liberty of the subject in Scotland, than in England; which tends greatly to retard the improvement of the country.—Smuggling,—another cause of preventing improvements.—Advantages that Scotland possesses over other nations, particularly England,—in respect to poor's rates,—the church-government.—Fisheries.—Observations on the salmon-fishing;—on the small white fishing;—how it may be augmented;—on the great white fishing.—Restrictive regulations with regard to it destructive.—On the white herring fishing.—Strictures on the British laws relating to this great national object.—In what particulars they have been defective.—A premium proposed for a new and better method of curing herrings.—On the British whale-fishing.—Strictures on the British laws relating to it.—Hints for amending them.—Conclusion.



O B S E R V A T I O N S

O N

N A T I O N A L I N D U S T R Y.

L E T T E R S I X T E E N T H.

To Mr ***** London.

DEAR SIR,

December 24. 1775.

THE beneficent Creator of this universe hath framed the original laws of nature with such consummate wisdom, that in all cases the destruction of one thing serves as a basis for the renovation of another ; and the corruption of human institutions are often productive of more extensive benefits to man, than the most perfect systems he could deliberately have invented by his own most penetrating sagacity. It is from the corruption of the

see of Rome that we have derived all the benefits that have flowed from the reformation in religious matters; and it is from the corruption of a Feodal aristocracy that our unrivalled civil constitution has gradually been matured into that perfect system of political liberty which is justly thought to constitute our highest felicity.

But nothing in which human counsels have a share is altogether perfect. Man's judgement is warped by prejudices; and he is constantly swayed by passions and affections that pervert his will, and mislead his understanding. It is not, therefore, surprising, that our minds should still be infected with a slavish veneration for some religious tenets that derive their origin from the superstitions of Rome, which were not entirely purged away at the reformation: nor is it to be wondered at, if we still retain an unreasonable attachment to some favourite political tenets that were supposed to constitute the highest perfection of reason, while the Feodal system of government was universally prevalent in Europe. But it is the duty of the candid enquirer to point out these errors whenever they can be discovered, and to expose with becoming severity, the mischiefs that have been derived, or may accrue, to society in consequence of these unreasonable prejudices.

When there was no general protector of the state, nor universal system of laws by which the whole members of the community were governed, every individual was obliged to rely on the power of his own arm, or on that of some other still more potent chieftain, for protection. In these circumstances, it was wise,—it was prudent,—it was even in some measure indispensably necessary, to prevent property from being divided into small portions; and in conformity with these ideas a system of legislation was universally

fally adopted, by which landed property descended without division to the nearest male relation of the former proprietor on his decease. And in conformity with the same idea they even went farther, and rendered the lands altogether unalienable in certain cases.

The first part of this system, however unjust in itself, has been adopted by almost every European state; and however opposite to that spirit of equal liberty and commerce that constitutes the most striking feature of our happy constitution, has been retained even in Great Britain herself. But by the cunning policy of your Henry VII. the power of the latter part of the institution was broken in England. To which very circumstance, notwithstanding the inconveniencies that attend the imperfect palliative he was thus obliged to adopt, you ought, in a great measure, to ascribe that happy revolution in political jurisprudence that has taken place in Britain since that period.

But our Scottish monarchs, less cunning or less powerful than him, never dared to attack, even in the most indirect manner, this powerful bulwark of aristocratic power; but, instead of that, as the utility of such an institution gradually disappeared, and as the hurtful effects of it began to be more and more felt, under a government when the general security of the subject encreased, they, as if afraid that this child of despotism might have been smothered under the general liberty of the subject, devised new methods of giving it strength and stability; so that, at the very time that your Henry was sapping the foundation of this bulwark of Gothic power, the King of Scotland was strengthening it in his dominions, by a system of laws relating to *entails*, which were then established by the positive decrees of the state, and still take place
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in this kingdom, which have hitherto retarded the improvement of this country in a most powerful manner, and must continue gradually to produce more and more baneful effects so long as they shall be tolerated, till it end at last in the total ruin of the state, unless it be in time prevented. And we all know, that it is not after any destructive power has been fully established, that it can be attacked with the most rational prospect of success.

I flatter myself, that, however much some others might be disposed to accuse me of drawing an unreasonable gloomy picture of fancied ills that probably never can arise from this cause,—*you*, who are so well versed in history, and the revolutions of nations, will concur with me in being sensible, that these are not *imaginary*, but *real* ills; which not only *may*, but *must* be experienced, if not in time prevented. What, I pray, has been the cause of the ruin of every state ancient and modern? Search their annals with the most scrupulous care, and it will be found, that *an unequal division of property among the different orders of the people* has been the real source of all their misfortunes. And what reason have we to think that this general law will be reversed with regard to ourselves? Are not mankind actuated still by the same passions and desires as on former occasions? We have no other prospect of evading the same evils that others have experienced, but from the wisdom and equity of the British parliament, which, it is to be hoped, will see and check this great evil before it arrives at its greatest height. But the sooner this is done the better:—its baneful influence is already experienced in this part of the country, and tends to prevent that general prosperity in which the real strength of the state can alone consist.

In a country which has a dependence on commerce, nothing
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can be more incongruous, than to have any part of the public funds of the state indispensably locked up, and prevented from ever coming to the market, or from being applied to any active use in trade? — Yet such is the certain and unavoidable consequence of that ancient Gothic law, which, in many respects, operates like a dead weight constantly tending to retard the progress of every step towards improvement in Scotland: the effects of which, although severely felt by numberless individuals, do not seem to have been hitherto so carefully attended to as its importance deserves. — I shall, therefore, dwell upon it a little for your satisfaction.

If we endeavour to trace the consequences that result from the law establishing entails upon the disposition and circumstances of the inhabitants of those countries in which it prevails, we shall perceive, that the most obvious of these consequences is the producing a number of indigent people in a genteel station in life. All the children of a man possessed of a good landed estate, are naturally bred up in their father's family, where, while young, they are accustomed to see a mode of living, and acquire a taste for it, which none of them, save one, have any prospect of ever being able to realise in their own families. When the sons grow up to men's estate, the father, by being unable to borrow money upon a fund that must fail with his own life, finds himself debarred from entering his sons to business, where their capital would be too small to be sufficient to support them in that line of life in which they had been accustomed to move. The young persons themselves too, having imbibed ideas of their own *gentility* very early, and being accustomed to look down with a sort of contempt on people of business as below them, are but little disposed to associate with them, or enter into that line of life, were their

their parents better able to support them in it than they usually are. The necessary consequence of all this is, the younger children of gentlemen of fortune either enter into the army or the navy,—or go to some foreign country to try what they can do for themselves,—while commerce, and other beneficial trades at home, are left to people of mean education and inferior rank, who have but seldom a stock sufficient for carrying it on with the vigour that it ought to be, and who are on these accounts held in a lower degree of estimation among all ranks of people, than the important station they occupy ought naturally to claim.

You will easily perceive, that this circumstance alone naturally accounts for some of the most striking features in the national character of the Scots.—A liberal education may in general be expected to be given to all the children of a man of an ample fortune while he is alive.—But these children are afterwards scattered abroad through all the regions of the earth, and are often obliged in foreign countries to accept of employments far beneath the prospects they had entertained in their younger years;—employments that fall to the share of adventurers of lower rank in general from other countries. Hence their learning and address are in general above the par of other nations. Stimulated likewise by the constant desire of supporting that rank in life which they think is their due, they are perhaps more assiduous in their respective stations, and pique themselves more upon maintaining the character of a gentleman, than others do. Which qualities, although they may at length procure respect and esteem, are always disgusting and unamiable to strangers.—Pardon this short digression.

In countries, on the other hand, where a man has the entire com-
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mand of all the funds of which he is possessed, the natural desire to see all his children happy around him, prompts him to push his younger children into business as soon as he can. His estate is a fund of credit, by which he supports his younger children early in life.— The elder son becomes in this manner a man of less state and dignity than he would be: — he feels more of the wants of a man, and is therefore more near the same line with his brothers.— The younger brothers too, by often becoming rich themselves, support that family-estate in the end of their life, which so liberally helped them in the beginning of it.— This establishes a mutual exchange of good offices, which is productive of the happiest effects,— and renders the man of business and the country-gentleman nearer the same rank in the estimation of themselves, and of every one else, than they are in Scotland.— You will also recognise in this sketch the origin of some of the most striking features in the national character of the English; I wish to God it were universally prevalent over all the island!

When a man looks around him, and compares the few benefits that result to any individual from this Gothic institution, with the innumerable list of ills it produces to those very individuals it seems calculated chiefly to favour, it appears a little surprising, that there should be found almost any persons who do not heartily concur in wishing it abolished.

One would imagine, that nature had intended, that all the children of a parent should be equally dear to him; and that he should be as anxiously solicitous to provide for the younger branches as for the older one.— But, by this institution, he finds himself tied up from serving them; and his elder son, who usually knows very well that he must one day have the estate, is

not from that circumstance induced so to act as to show that he deserves it.— This too often breeds internal trouble in families, and embitters all domestic felicity.— In such a situation, of what avail are titles and a splendid equipage? — The shepherd, who retires to his humble cot after the toils of the day, and finds his children happy in one another, enjoys a lot far more to be coveted, than one who should have all the revenues of the Indies, without domestic unity and content.— We would, therefore, suppose that a man in these circumstances would wish to break down this oppressive restraint upon his own enjoyment.

But there are are innumerable instances in which a man shall not even have the satisfaction of seeing his estate descend to his own children.— He has perhaps a numerous family of daughters without a son,— all of whom he must leave helpless and indigent, without provisions in any way suited to the rank he holds in life; while his ample revenue descends to a stranger, whom he perhaps detests. The debts he had contracted before he came to his fortune, in the *hey-day* of youth, perhaps prevent him from accumulating a fund for their support, and he leaves them dependent on the wide world in some measure for subsistence. Is the lot of such a one to be envied? Surely no one can think that *he* would vote for the continuance of such a law.

It would be painful to enter more minutely into the detail of the domestic uneasiness that so copiously flow from this system of legislation, under which thousands in this country perpetually do groan; and yet so powerful a motive is vanity with some, that, merely for the pleasure of perpetuating a name that shall descend to distant ages, they shall not only themselves be contented to bear all these accumulated hardships, but shall coolly resolve to perpetuate

ate the same distresses to their posterity through all the successive ages of time, if it were in their power.

It is from this principle that we meet with many persons who, with an insatiable greediness, thirst after land, as the *summum bonum* of all earthly felicity; for the obtaining of which they voluntarily deny themselves on some occasions the common necessities of life; and which they no sooner obtain, than they secure to one favourite child, under the strictest entail that human wisdom can devise.—Vanity of vanities, saith the preacher;—all is vanity. And surely no species of it is more ridiculously foolish than this one. Shall such a puny thing as man, with impious audacity, stand up and oppose his feeble regulations to the immutable decrees of the great Creator of this universe?—He looketh in his wrath, and the nations are discomfited: with the breath of his nostrils he sweepeth them from off the earth, and the proudest nations, with all their proudest works, are alike buried in perpetual oblivion. Where is Babylon the mighty! Tyre and Sydon are in ashes; and *eternal* Rome herself, as those vain conquerors of the world were proud to call her, is but a striking monument of the fleeting instability of all earthly grandeur.—And dost thou think, O feeble man, that thy name shall remain, when such mighty works have failed; or that thy little policy shall prevail, while the very traces of whole nations that were renowned for wisdom, have disappeared on the earth! I know not to what I could so properly liken the efforts of a man thus employed, as to that of a spider, which should vainly hope, by means of the flimsy thread spun from his own bowels, to fix with immovable firmness to the shore, a ship, the pride of the British navy. So long as all remains at rest, he looks with fond complacency on his labours, and thinks that they shall remain to latest

posterity a monument of his power and wisdom. But no sooner does the tide begin to flow, and heave the massy vessel from her bed, than all these puny bands are broken asunder, and he sees with infinite regret that all his labours have been utterly in vain.

Exactly such must be the end of all these cunning devices of man to perpetuate his name. While the world is quiet, all may go on as he wishes for; but the slightest revolution in human affairs, puts a final end to all his hopes; and another system, perhaps equally vain, is built upon its ruins.

Since then our hopes of distant aggrandizement are vain,—let us rather strive to render those happy who are within reach of our own good offices at present, than punish ourselves, and do hurt to others, for the sake of cherishing a phantom of the brain. —Short is the road that leads to happiness, were we but wise enough to follow it.—The labours of that man alone have a chance to descend to posterity, and bless them,—whose efforts rest upon the firm basis of justice and humanity;—for these labours co-operating with the immutable laws of nature, shall be respected by all parties, and shall remain unshaken amidst all the revolutions to which human affairs are perpetually subjected.

Entails, therefore, are public nuisances, and ought as such to be abolished.—They are the immediate source of infinite inquietude in private families; they retard every public undertaking, and only serve to foster a spirit of pride, of idleness, and of despotism.—How incompatible, these, with the desires of a free people!

If we view this law as affecting the public interest, and the prosperity

prosperity of the state, we shall find that it deserves equally to be condemned. Nothing contributes so much to enrich and improve a country, *in any situation*, as a number of small estates.—But large estates in corners of the country, *remote from the court*, are a most intolerable hurt to it:—for as these rich proprietors naturally resort to court, their tenants are left under the management of a steward, whose interest is not so necessarily connected with the improvement of the country, and well-being of the peasantry, as that of the proprietor is, and who does not therefore attend so much to these things as might otherwise be the case;—and as the rents are thus constantly carried out of the country, the efforts of its inhabitants are rendered exceedingly languid on that account.

But while the country is parcelled out among a number of small proprietors, who are obliged to reside upon their own estates,—every one is studious to improve and adorn his native seat to the utmost of his power.—The money he receives as rents are spent among his own people.—He gives bread to the poor, and diffuses blessings around him.

Care ought therefore to be taken, that in the distant provinces of the nation especially, overgrown estates should be rare; and on this account no mode of inheriting is so favourable for a free people as that of Gavelkind;—which necessarily produces a numerous yeomanry, and by consequence a number of active, spirited, industrious subjects, capable at all times of executing every enterprise, whether for the defence or improvement of a country, that a wise government could require. But the law of entails, which operates in a manner directly the reverse with this, tends to break the spirit of the people, to retard improvements, and to depopulate

depopulate the country ; — on all which accounts no wise government ought to tolerate it.

An attempt was made some years ago to break these entails entirely ; — but the opposition was so strong by many of the members for Scotland, that it could not be carried through. Some trifling alterations were made, chiefly intended to promote improvements by the proprietor. These, however, will produce little other effect, unless it be to generate innumerable law-suits ; which may perhaps be attended with the good effect of making many become tired of an institution that is attended with so many vexatious circumstances.

Perhaps if liberty were granted to entail lands to a certain extent, and no higher, for each order of the nobility, all the good effects that can be hoped for from entails might be secured, and the inconveniencies in a great measure obviated. It seems to be reasonable, that a nobleman should be possessed of an estate suitable to his rank, otherwise he degrades the order in which he is placed. Our forefathers seem to have judged wisely in this respect, by making the title to go with the estate ; — but since that cannot be permitted at present, it would not seem unreasonable to grant by law a power to each order of the nobility to entail to such an extent, and no further ; — suppose a Duke to the extent of L. 5000 a-year, — a Marquis L. 3000, — an Earl L. 2000, — a Viscount L. 1000, — and a Baron L. 500 ; — and as a Knight-Baronet ranks above a private gentleman, suppose they also might entail to the extent of L. 100 a-year. — These sums would prevent the several families from ever being reduced to *absolute want*, and at the same time could occasion no hurt to the country *. I ima-

* [The note here referred to, is put at the bottom of the following page.]

gine that if such a plan were proposed, it would take off a good deal of the opposition, when the question about abolishing entails should come to be debated in parliament.

Another circumstance that has retarded the improvement of Scotland, is our mode of trials in civil causes, which is less calculated for inspiring a spirit of liberty, or for jealously guarding the privileges of the subjects, than that of England. All *criminal* causes are tried in Scotland, as well as in England, by a jury;— and by a jury constituted upon more equitable principles than that of England, although still liable to some objections:— but *civil* causes are finally referred to the arbitration of the judges in all cases. Hence it must necessarily happen, that in those breaches of the peace which tend to harass individuals in the enjoyment of domestic comforts, especially in the lower spheres of life; as the judges cannot be impressed with such a lively and indignant sense of the injury, as those who may themselves have felt it, or who shall be under immediate danger of suffering in like manner; the fines, therefore, that are awarded against those who attack the liberties of the subject, especially in distant corners of the country, by the inferior courts, are often so trifling, as not to be sufficient to deter men of great fortune from encroaching too far upon their sacred privileges, or for giving the meanest individual a lively sense of his own security and importance.

Nor is the advantage that the subject enjoys from the mode of

* A law might even be framed on these principles, by which the Noble families in the realm might be more effectually secured from dependence than they are at present, by *obliging* every Nobleman to entail lands to the above extent, instead of simply *permitting* it.

trial

trial by jury in civil cases, confined merely to the benefit that the poor enjoy from the above-named circumstance; for where cases are tried by jury, they must of necessity be determined in a much more summary manner, than where a judge alone can finally decide on the case, and who is therefore at liberty to deliberate on it as long as he may incline.—Hence it happens, that in law-suits in Scotland, a man may, if he pleases, plead so many causes of delay,—by starting new difficulties when the process comes near a decision, as to have it in his power, if he is a richer man than his antagonist, to subject him to so many vexations, and to oblige him to incur such a heavy expence, as to make him be a very great loser, even when he at last obtains the clearest decision in his favour.—You will easily perceive, that these circumstances being well enough known both by the rich and the poor, must necessarily tend to repress the spirit of liberty in the one, and to encourage a spirit of domination in the other. For a rich man, conscious of the superiority he can thus have over a poor one, even where justice is clearly on the side of the latter, will often take advantage of this circumstance to oppress him, or accomplish his total ruin, by leading him through a train of tedious law-suits from one court to another, though cast in every one of them;—the expence to the one being a trifle he can easily spare, while it consumes the little all of the other.—To avoid this, therefore, he is fain to crouch beneath the rod, and only sigh in secret against that injustice he feels, but dares not oppose.

This is the original cause of that diffidence that the lower people in Scotland have of those above them, and of that deep-rooted hatred of the great, which often breaks out in secret acts of malevolence; and it is likewise the cause of that gloomy reserve and melancholy dejection which you took notice of in the lower ranks

of people here. From this circumstance likewise arises that tendency to litigation, of which the people in Scotland are but too justly accused. For law-suits here are not so often a struggle for obtaining justice, as a contention for power; inasmuch that it has become a common proverb, that such a man *would rather have an inch of his will as an ell of his purse*. This is also a sore distress.

The best remedy that could be applied, would be, to obtain a law for trial by jury in *civil cases*. But this, I am afraid, we need not expect. The only remedy that remains, depends upon our judges. For if they should make an example of two or three conspicuous offenders, by punishing them in a most exemplary way; — if they should in all cases make every trespass against the general liberty of the subject be expiated by high penalties and personal punishment; the evil would be in some measure abated: but if they shall continue such trifling fines, as *ten or twenty* pounds against a man who shall deliberately enter into the dwelling-house of another, and there strike and maltreat him, so as to endanger his life, what security can any man enjoy? — And if a man who shall have been imprisoned by another for a *supposed* civil trespass, and shall clearly prove that he was entirely innocent of the crime, nor did any thing that could give a handle to raise a suspicion against him, shall be able to obtain no redress at all for such a daring outrage, we shall be forced to acknowledge, that the liberties of the subject are not guarded with such jealous care in Scotland as they ought to be; and that therefore it is not surprising if the common people are not capable of those great exertions that can only spring from liberty and independence.

Another inconvenience that Scotland labours under, in common

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with England, and which has tended very much to stop improvements here, is the temptation to smuggling; to which they are so much subjected by the numberless restraints on trade in Britain, and by the convenience of their situation for carrying on that destructive kind of clandestine commerce.

In justice to the country-gentlemen of Scotland, however, I must observe, that this pernicious trade has met with every discouragement from them for some time past, that might be expected to be produced by a thorough conviction in them of the very great prejudice that it occasions to their essential interests. But so long as the duties on certain commodities of general consumption shall continue to be so very high, and so long as it shall be the interest of the officers of the revenue, that smuggling should continue, it may, by the efforts of the country-gentlemen, be moderated, but can never be entirely suppressed.

In the mean time the real interest of these country-gentlemen, and of Scotland in general, is essentially hurt by this circumstance. All improvements in agriculture or manufactures in Scotland must begin upon the sea-coast, as it is there only that a ready market can be found for the products or manufactures of the country.—But so long as the persons on the sea-coast shall turn their chief attention towards smuggling, these improvements must be at a stand. Fortunes suddenly acquired by a lucky chance, are usually spent with an unthrifty prodigality; and bankruptcies, the necessary result of great losses, are not only productive of immediate ruin to the parties concerned, and convulse the internal œconomy of the state, but also lead to those daring crimes that are produced by despair. The morals of the people are corrupted, — their activity is misemployed, and all their funds, instead of
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being employed for the benefit of society, are applied to augment its distress. It therefore deserves the serious consideration of the legislature, to determine whether the benefits that the nation reaps from these restraints of commerce are sufficient to counterbalance the mischievous consequences they produce; or whether every purpose they want to accomplish, might not be better effected by moderate duties, which would of necessity be always paid, than by immoderate ones, which make the prohibited goods find their way into the country by stealth, in much greater quantities than ever could come by the way of a fair and open trade. Many men of great judgement have been of the latter opinion, to which I myself am disposed to incline.— But I shall not here enter more deeply into that discussion.

These, my dear Sir, are the chief causes that have hitherto retarded the improvement of Scotland.— These are the causes that occasioned the misery and discontent among the lower classes of people, which gave rise to the numerous emigrations about which you was so anxious to be informed; and these will be the causes of future miseries and discontents, that may break forth, perhaps, in some way of which we have at present no clear idea, unless care is taken in time to remove them.

I have chosen to go to the root of these evils, rather than to dwell upon trivial topical inconveniencies, which, although interesting to a few individuals at a particular time, are not deserving the general attention at all periods.— I have spoken with freedom of all parties concerned, and with asperity of none.— I consider the happiness, the stability of the state, to rest upon the welfare of every individual in it; — and there is not one individual in the nation whose prosperity I would not wish to promote as far as my influence could extend; — but

neither is there one individual in the kingdom whose interest I would wish to promote to the prejudice of any other.— Happily what tends to promote the real interest of individuals, when well understood, most effectually tends to the good of the whole; and I should think that my life had not been spent entirely in vain, if I could imprint a deep and lasting impression of this great and leading fact in political disquisitions upon the mind of any one man of superior rank and influence, whose example might help to inculcate it upon the mind of others.

To counterbalance these inconveniencies, and to encourage those who may wish to promote the prosperity of Scotland, I may be allowed to observe, that she likewise enjoys some advantages that are not of a trivial nature.

The number of safe and commodious harbours she enjoys; the vicinity to the sea of almost every part of the kingdom, with the advantages that result from thence, have been already mentioned. — In these respects no nation perhaps in the universe can be put in comparison with her.

She has likewise the advantage over England in being freed of poors-rates; — a burthenfome tax, fraught with many growing evils, which has a natural tendency to enervate industry, to corrupt the morals of the people, and to depopulate the country.

She is freed of the tithe in kind; — an injudicious and oppressive tax, that slackens the hand of the labourer of the ground, — produces diffensions and heart-burnings between the pastor and his parishioners, — and gives room for collusion and frauds that
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are subversive of the peace of society, and the well-being of the state.

She is likewise freed of dignitaries of the church, whose ample revenues necessarily lead to negligence of office, to indecorum in conduct,—to non-residence, and pluralities: instead of which she possesses a body of clergymen, whose mediocrity of circumstances insures perpetual residence among their flock,—whose want of power prevents them from being troublesome to any man,—and who, having no other means left for acquiring respect and influence, but what they derive from a superior education, and exemplary manners, cultivate with unceasing assiduity the moral virtues, and by attending with care to the important duties of their office, secure the respect and good-will of all their parishioners. There is not perhaps in the world such a numerous body of men, so respectable on account of the moral virtues that elevate the human mind, as the clergy of Scotland:—nor is there a country where, without either superstition or hypocrisy, the clergy have such influence over the people, or have their instructions so well attended to. This circumstance helps to mitigate those evils already enumerated; and, if conjoined with that political freedom and activity that the English enjoy, could not fail to produce the most salutary effects on society, by repressing those excesses into which mankind are but too prone naturally to fall.

Is it not somewhat strange, that England, whose constitution of civil government is so much more favourable to that liberty of the subject which results from equality of power, should have adopted a system of church-government so naturally calculated for the purposes of despotism; while Scotland, whose political institutions in general favour too much of despotism, should have adopted

opted a system of church-government, the best adapted to the nature of a free state that human wisdom has been able to invent?

I have purposely avoided, till this time, saying any thing about the fisheries on the coast of Scotland, about which you are so anxious to be informed; because I foresee, that till some plan is adopted to mitigate those evils that depress the lower ranks of people in Scotland, and to bestow upon them riches and activity, all attempts to reap benefits from thence must be poor and inconsiderable; and because I am sensible, that if ever these beneficent purposes shall be effected, the fishings, without almost any effort of those in power, will become a great and astonishing object of national wealth and industry. As this, therefore, must naturally rather follow than lead the way in the improvement of Scotland, I have hitherto kept it out of sight.— But now I shall add a few observations on this important subject.

There are four kinds of fisheries, that are, or might be carried on with great advantage on the coasts of Scotland, viz. first, The salmon fishing; secondly, The small white fishing, viz. haddocks, whittings, and other small fish, usually consumed by the inhabitants green; — thirdly, The great white fishing, viz. of cod, ling, tusk-fish, &c. which are salted and dried in the sun; and, fourthly, The herring fishing.

The first of these kinds of fishing is in general very well understood in Scotland, and is carried on with so much spirit and œconomy, as gives room to think that it admits of little improvement.

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The second, as it depends in a great measure on a ready market in the neighbourhood for the fish caught, admits of great improvement in many parts of the coast. On the north and west coasts, the sea swarms with great quantities of the finest kinds of fish, which are suffered to sport there almost unmolested, as the country is so thinly inhabited, the roads to the internal parts of it so much neglected, and the people in general so poor, as to offer but a trifling market to the fishermen. But if ever manufactures should be there established, and, in consequence of that, if the roads should be helped, and money become more plenty, the fishings would keep pace with the other improvements, and would become a very important source of wealth and strength to the nation. All attempts to promote this branch of national industry in any other way, must, however, be from obvious causes impracticable.

The fishery for dried cod, &c. has of late been pretty much attended to upon the coasts of Shetland and the Western isles, and has afforded very good returns to some adventurers from the north of Scotland, who have tried it for some years past. The fish may be caught in abundance; — but the climate is unfavourable for curing them, the country being liable to frequent rains during the summer season. Yet there is no doubt, that were the inhabitants able to afford proper stages for drying them on, as on the coasts of Newfoundland, this might become another very great source of wealth and vigour to the nation.

Wood, however, in these countries is so dear, and the people are in general so poor, that it must be long, if they are left to themselves, before they can be able to obtain these conveniencies. But from the experiments that have already been made, there can
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be no room to doubt, that if merchants from other places would erect proper shades along the rocks, into which the fish might be easily carried at night, or when it rained, they might carry on a very gainful trade; either by purchasing the fish when fresh caught, from the native fishermen of the place; or by keeping vessels themselves for catching them; or by both,—which seems to be the most eligible plan. The women, and poor people of the country, could be hired for very moderate wages to turn them upon the rocks, and look after them. This is an obvious source of wealth, which could only have been so long unattended to, from the general want of stock among the adventurers of this country.

In the mean time, as the inhabitants themselves are assiduous in improving the advantages they possess as far as their slender means will admit of, they ought to be freed from every possible discouragement. Whether the complaints in the Appendix, N^o II. III. and IV. are well founded or not, I cannot take upon me to say; but they are of such a nature as to deserve to be inquired into by those in power.—*I will not wound the bruised reed, nor quench the smoking flax*, was the beneficent speech of the most tender benefactor of mankind. The first dawnings of industry ought on no account to receive the slightest check. Severe regulations, however well meant, are perhaps in almost all cases hurtful to manufactures and national industry; but they are, without any doubt, *always* pernicious in the infancy of any art.—On these occasions men, with a trembling dread, are induced to advance at all, and ought to be suffered to probe their way with perfect freedom. If some should accidentally go wrong, their own interest will soon bring them right again. It is only after a manufacture is entirely established, and after the most proper plan of prosecuting it with the greatest œconomy has been *fully* ascer-
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tained, and well understood, that regulations, approved of by the most sensible persons engaged in the business, may with safety be adopted. And even then, a judicious man will chuse to make but few regulations, and be careful that these few are not liable to be abused by those who are entrusted with the power of enforcing them. It is in general safer to entrust a man with the management of his own affairs, than to subject him to the controul of another, who is not so nearly interested in the success of the undertaking. Nothing, therefore, relating to these regulations, ought to be discretionary. The rules ought to be clear, and accurately defined, so as that any man of ordinary understanding can know with perfect certainty on every occasion, whether he has transgressed the regulations or not. In every case where the nature of the thing does not admit of this precision, the liberty of the subject absolutely requires that there should be no restraint.

Those who think that trade may be regulated, like a watch, by their decrees; and who are persuaded, that all would run into confusion were their hand to be slackened for a moment, will no doubt condemn these principles.—But such as have attended to the nature of man, and the circumstances which regulate his actions, will not be disposed to doubt the axiom.—These *regulating* politicians, if I may venture a new phrase,—put me in mind of a man who was crossing a ferry in a windy day, when the boat heeled very much to one side, so as to make him afraid it would be immediately overset. To prevent this dreadful misfortune, he put his shoulder to the boat, and pressed with all his might, and called to others to assist him:—but when the failors laughed at him for his folly, he was at length so much enraged at them, that he withdrew in a huff,—saying, *Well, well, let her go*

to the bottom, and see if you will laugh then; firmly convinced that the vessel would be immediately overfet.— But to his great astonishment it went on without the smallest variation. It were well if the great efforts of our never-ceasing guardians in commercial affairs were always equally inoffensive.

But although these fishings are of great importance, and would be considered as very great national benefits by any other people, they are so inconsiderable in comparison of what the herring-fishery might be upon the shores of Scotland and its isles, were it properly attended to, as to make them be in a great measure overlooked by political writers on this subject; who dwell with just admiration on the benefits that might be derived from the herring-fishery, and express the greatest astonishment that it should have been so long neglected by the Scots themselves in particular, and by the British nation in general. To me, however, this occasions no degree of astonishment at all; as the neglect of it by the Scots may be easily accounted for from the circumstances that have been already explained, and the little success that has hitherto attended the efforts of others in that line may be as easily accounted for.

So long as the inhabitants of Scotland and the isles are in general poor, dependent, and dispirited, it is in vain to hope that ever *they* can be induced to engage heartily in any great undertaking, however obvious the advantages may be that could be derived from it. But let any plan be adopted that shall alter their circumstances in these respects, and it would be then impossible to prevent them from engaging in this very advantageous fishery, and of pushing it to its greatest degree of perfection; and when this shall come to be the case, Scotland and the isles, instead of
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being in some measure a useless appendage of the British crown, will become of as great importance both as to revenue and defence, as any other part of the British dominions; and be the envy of all surrounding nations. But till some plan is adopted for accomplishing the *first* purpose, every attempt that shall be made to effect the *last*, must prove nearly of as little significance as those that have been already adopted.

The great point wanted to give stability to the British herring-fishery, is to diminish the expence incurred by those who engage in it.—For till that shall be accomplished so far as to bring the British herrings cheaper to a foreign market than those of Holland can be afforded, the business must be carried on in a languid manner, that can be attended with little benefit to the nation. But this expence can only be diminished by the frugality and industry of the persons actually engaged in the fishery; which can be accomplished in no other way, than by giving to those individuals engaged in it the certainty of reaping for themselves, and not earning for another, the *whole* profits that shall be derived from that industry and frugality. *No labour that is carried on by slaves, can ever be done at so little expence as by freemen.— Nothing that is performed by hirelings, can ever be performed so cheap as by men who are working immediately for their own behoof.*

This fundamental axiom in politics, the justness of which is confirmed by the experience of all nations, ancient and modern, seems to have been entirely overlooked by our legislators in their attempts to establish the herring-fishery; in consequence of which their efforts, after thirty years experience, have been found to have produced hardly any beneficial effect.—And by adhering to this political axiom with invariable steadiness, the

Dutch, who have many natural impediments to surmount that we have not, do still continue to carry on a successful fishery upon our very coast, and undersel us in foreign markets by the fish caught sometimes by our own people, even in our own harbours.

The laws that have been at different times enacted in Great Britain with regard to this grand fishery, seem to have been framed directly in opposition to this axiom. And I have no hesitation in saying, that a Dutchman who should read these laws, would be perfectly satisfied, that if they were intitled, acts for *discouraging*, instead of *encouraging*, the herring-fishery, the title would correspond much more perfectly with the laws themselves than it does in its present form *.——He would say, that to encourage the herring-

* By the 23d George II. cap. 24. a society was instituted, for twenty-one years, at London, under the name of *The Society of the free British Fishery*, who were empowered to raise and to employ in the British herring and white cod fishery, any sum not exceeding L. 500,000; for which sum, or whatever part of it they could shew was actually applied for that purpose, they were to receive each year L. 3 per cent. for fourteen years; and were besides to receive 30 s. per ton *per annum* for every vessel employed in that fishing, on the following conditions, viz.

Every vessel intitled to the bounty, was to be a decked vessel, built in Great Britain, *after the act commenced*, on purpose for the herring-fishery, and nothing else, — to be employed for no other purpose whatever.

Such vessel shall proceed each year from some port of Great Britain, (this to be attested by customhouse-officers, and) “so as to be at *Brassay Sound in Shetland* at the general rendezvous, on the *11th day of June*, and shall continue following and fishing among the shoals of herring as they move southward to the *1st day of October*; or shall proceed to *Campbell-town in Argyleshire*, and be at the rendezvous there, on or before the *1st day of September*, and shall continue fishing among the shoals of herring as they move, to the *31st day of December*, unless they shall have sooner completed their loading.”

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herring-fishery effectually, the British legislature ought to have aimed at diminishing the expence of that fishing to the several undertakers as much as was in their power :—instead of which they

Every such vessel shall, moreover, before she can be intitled to the bounty, “ have on board twelve Winchester bushels of salt for every ton such vessel is capable of holding, which salt shall be barrelled up in new barrels, and as many more new barrels, as such bus or vessel is capable of carrying.”

And every such vessel “ of seventy tons burden, shall have on board, or belonging to her, two fleets of nets, every fleet to consist of fifty nets, each net to be thirty yards full upon the rope, and seven fathom deep; and so in proportion for vessels of a greater or lesser tonnage.”

And every such vessel “ of twenty tons burden, shall have on board, at the place of rendezvous, not less than *six* men; and every vessel of greater burden, shall have over and above these six men, one man more for every five tons she shall exceed twenty tons.”

But notwithstanding this encouragement, it was found in a few years, (as might have been easily foreseen at the beginning), that the society could not carry on their business without loss; and upon their petition, the parliament augmented the bounty from 30 s. to 50 s. per ton, and left them at liberty as to the dimensions of their nets, “ provided that every vessel contained a quantity of netting upon the whole equal to what is required in the above act.”

But all this would not do. The affairs of the company fell from bad to worse, till at length it was entirely depressed; and after various alterations of the law as to this particular, of little moment, it was settled by the 11th George III. cap. 31. (which is still in force), on the following terms.

A bounty of 30 s. per ton is allowed to every vessel from 20 to 80 tons burden, that shall be employed in the British herring-fishery,—provided as follows.

That such vessel be a decked vessel, built in Britain, after the 1st day of January 1760.

Such vessels “ shall proceed directly upon the said fishery from that part of the united kingdom to which such vessel shall belong, and where the owners reside; and that the owners of such bus or vessel shall take out their licence from the collector and comptroller of the port where such bus or vessel was *bona fide* manned, victualled, furnished and accoutred for the voyage.”

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they have endeavoured all they could to encrease it, by loading the several undertakers with an unnecessary apparatus of nets and instruments, that they can hardly ever have occasion to employ.

It is hard to guess what was meant to be the benefit reaped by these restrictions. It seems to be a matter of little consequence to the nation, whether a vessel shall sail directly from that port where the owner resides, or from any other port of Britain; —but it may be a great loss to the owner of a vessel, to bring her perhaps from a distant port to his own on some occasions.

Every vessel to contain the same proportion of hands as formerly; “and shall have on board at the place of rendezvous 250 square yards of netting for every ton of bufs-measurement, *together with the customary quantity of other materials for the equipment and mounting of the said 250 yards of netting in the fishery business;* but with liberty to make use of such nets in the same as shall be best adapted to the said fisheries.”

All restrictions are perhaps hurtful; but surely nothing in any law of this sort should be left indefinite, and therefore liable to different interpretations according to the humour of every petty officer; which must be a source of much vexation. — The clause in *Italics* is liable to this objection. — It is besides absurd; because the difference in the form or size of nets which they are at liberty to employ by this act, may make a variation in the *customary quantity of other materials* necessary.

The places of rendezvous are by this act declared to be *Yarmouth* in the county of *Norfolk*, *Whitehaven* in the county of *Cumberland*, *Leith* in the shire of *Edinburgh*, *Inverness* in *Invernesshire*, *Brassly sound* in *Shetland*, *Campbelltown* or *Oban* in *Argyleshire*, and *Kirkwall* in *Orkney*. The vessels to be at one or other of these places of rendezvous “on or before the *twenty-second day of June* each year, to continue fishing till the *twelfth of October*; — or shall be at one or the other of these places on or before the *first day of October*, and continue fishing till the *eleventh of January* following.”

Whether the great latitude given by this act for the place of rendezvous, especially for the first fishing-season, will be beneficial or not, is perhaps a little doubtful. The herrings begin to appear first upon the coasts of *Shetland* in the month of *June*, and advance slowly southward, so as to reach *Yarmouth* in any considerable quantities about the end of *September*, or beginning of *October*; and are rather

ploy. He would say,—that if they had really aimed at diminishing this expence, instead of confining the premium to those only who were rich, and capable of forming great equipments; by which circumstance the poor, who must of necessity be the operators in that great work, are effectually deprived of any immediate benefit from thence; they would have devised some method of bestowing a premium that should have extended its influence to the meanest individual, in proportion to his industry. —He would say, that if the success of the fishery had been the principal object aimed at, rather than the enriching some powerful undertakers, the premium ought not to have been so considerable as to indemnify these for almost their whole adventure, without any industry on their part, and to extend equally to the idle as the industrious; but should have been in itself more moderate, and so contrived as to encrease with the industry and skill of the respective undertakers. In short, he would say, that if the English had been jealous lest the Scots might at some time or other engage in the herring-fishing themselves, and from their natural advantages be enabled to outrival the Dutch in this branch of commerce, which they wished to prevent; and had they been afraid to avow this design openly, but resolved to effect it by an underhand round-about way, they could not have fallen upon a plan more effectually to have done this than that which

ther less forward in advancing upon the west coast.—It appears, therefore, to have been a judicious regulation in the first act the making Brassy sound in Shetland the place of general rendezvous in June. Perhaps this might have been with propriety also extended to Kirkwall in Orkney; but it hardly appears reasonable to extend it to any place farther southward before the month of September. It might require a fortnight to sail from Yarmouth, Leith, or Liverpool, in the month of June, before they could reach the place where a single herring is to be seen.

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they have adopted ; because it effectually excludes the natives from reaping any benefit directly from the premium, who were the only persons that, from local situation, and other circumstances, could carry on that fishing cheaper than any others ; — and because it puts it out of the power of enterprising individuals from diminishing their expence of tackle and equipments, and from supplying that deficiency by ingenuity and industry, seeing they must have these, whether they use them or not.

The consequence of these laws has been nearly in fact what might have been expected from the foregoing reasoning. In hopes of obtaining the bounty, many vessels are annually fitted out by rich individuals in England or elsewhere, which meet at the general rendezvous at the proper season, and make a great figure annually in a news-paper. These are commanded by men in general, who have no other interest in the adventure, than to draw their pay for the time ; and are navigated by persons who know no more about fishing, than I do about directing the manœuvres of an army ; and who are usually engaged at as low a rate as possible, being wanted merely to make a show at the general rendezvous. — The preservation of the nets, and other expensive articles of equipment, in order that they may make their appearance at the next annual rendezvous, is the principal care of the master, who accomplishes his end most effectually, by locking them up, and hardly suffering them to be wetted ; and while they remain on the station, which they are obliged to do for a certain time to intitle them to the premium, instead of applying themselves with assiduity to catching of fish, like skilful fishermen, they parade about like wanton idlers, — break and disperse the shoals of fish where-ever they meet them ; and, not content with this in the open sea, even enter into the creeks and bays, where

where small boats only could fish with propriety, and in which the natives, even without any aid from the bounty, would, if uninterrupted, make a reasonable profit to themselves. Thus these premium-vessels produce as much mischief as they can where-ever they go, to the great annoyance of the industrious fishermen, who are from this cause obliged in some measure to desert an employment that they would naturally follow with profit, if freed from this intolerable nuisance.

You, who have no access to know of these matters, but from the reports now and then in the news-papers, will be surprised at this account; but as you must sometimes have an opportunity of meeting with men who are natives of the West Highlands or isles, who are sometimes upon the spot, so as to know the truth, and they will satisfy you, upon enquiry, that there is no exaggeration in the above account. But there is some reason to hope, that this species of idle industry will not long be continued: for, in consequence of the bounty, such numbers of ships are fitted out, as puts it out of the power of the commissioners of the customs to pay the premiums punctually; which occasions some little embarrassment to these idle adventurers*: and as this is attended with a very heavy expence to the nation, without producing any beneficial consequences, it is to be hoped that the matter will come under the consideration of parliament ere long:—and it is to be wished that the gentlemen and inhabitants of these countries, would, like other free subjects of the realm, petition parliament for relief in this respect, and be at pains to authenticate

* By the last act, it is provided, that these premiums shall bear interest at L. 3 per cent. till paid, from the time they fall due.

such facts as might lead the legislature to form a right judgement with regard to this matter.

When this subject shall come to be debated in that august assembly, I make no doubt but some men of judgement and discretion will be able to suggest some proper plan for the future, that shall be liable to fewer objections than any thing that I could propose.—In the mean time I may be allowed to suggest, that a small bounty upon every barrel of herrings properly cured,—in the same manner as is given for salmon, would promise to produce a much more beneficial effect than the present method of bestowing the premium: for in that case every man who was able to bear a share in fitting out the smallest boat, could be benefited by it, and would likewise have a chance to be rewarded according to the degree of his skill and industry; the hope of which reward would stimulate him to exert himself to the utmost of his power on all occasions.

And if, as an encouragement to the fitting out larger vessels, a moderate premium should be allowed for every vessel at so much per ton above a certain bulk, fitted out for that purpose, and remaining on that station for a certain time employed in the herring-fishery, without limiting them as to nets, &c. I can see no harm that would result from it;—these vessels being ordered to keep in the sea, and not to fish in the lochs and bays, which may be better fished by small craft.

If such were the law, there is no doubt but the natives on the coast would at once engage in it with all the eagerness that their circumstances would admit of. And in that case there is no room to fear, but that the money gained by lucky adventurers would
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be wholly applied to the augmenting their boats, and improving their tackle; which, together with the superior skill they would annually gain by experience, would augment their profits more and more; — and consequently make them more eager to prosecute the business, and extend their trade; till at length, becoming jealous of the Dutch, they would render *their* fishing near our own coasts incommodious. They would refuse them those little supplies and accommodations on shore, which at present enables them to diminish considerably the expence of their equipments. — These circumstances would raise the expence of herrings to the Dutch, while the prices to our own people would be gradually diminishing, as their skill and abilities encreased. Thus in a short time would we be able to drive the Dutch out of every market, even without the assistance of the debenture; which might be gradually diminished, as the circumstances of the case would admit of, till at length it should be wholly withdrawn.

Such is the natural progress of improvement when the bars that prevent these improvements from taking place are discovered and removed. When a man has power to avail himself of natural advantages, his own interest will prompt him to pursue it with an inconceivable degree of alacrity, as soon as he is certain that the benefits he derives from thence will be employed for his own emolument. And we may be always certain, that where-ever we meet with a people who neglect to improve some obvious advantage that their situation affords them, they are prevented from doing it by some secret influence that operates most powerfully, though unseen; which we ought to exert ourselves to discover, instead of blaming the people of obstinacy or stupidity, — or try-

ing to *drive* them forward by compulsory laws, and restrictive ordinances.

If such a plan of legislation should ever be adopted, its salutary influences would be greatly accelerated if the efforts of the fishermen were supported by that of merchants, who should come to purchase the fish upon the spot, and cure them for their own behoof; which would form a lucrative branch of trade, that would soon allure competitors in it *, to the great benefit of the nation.

We seem to have hitherto formed a wrong idea of the most profitable method of carrying on this grand national fishery, by adhering too strictly to maxims drawn from the practice of the Dutch; — not sufficiently adverting to the difference that is between them and us, merely on account of local situation. On this account alone, some particulars in their œconomy may be absolutely necessary to them, which would not only be superfluous for us, but highly destructive.

The Dutchman, by being obliged to make a tolerable voyage before he reaches the scene of action, and who, when there, is at a distance from his own coast, is under an absolute necessity of carrying casks and salt, and a number of hands, on board every vessel, not only for catching the fish, but also for salting and curing them upon the spot. — He must also have pretty large

* I am informed that a plan of this sort is already adopted on the West coast of Rosshire, where a company of merchants from Liverpool have established a manufacture of red-herrings, and have contracted to buy all the herrings the natives catch on that coast, at a certain stipulated price.

vessels to enable him to remain a considerable time upon his station, so as not to be obliged to leave the shoal too soon, and thus lose the advantage of a herring-fishery. All these particulars seem to have been considered as necessary to the success of our herring-fishery by the legislature in framing the preceding acts : — yet nothing is more certain, than that when the fish come into the very bays and havens of our country, large vessels are altogether unnecessary, and therefore an incumbrance. And where the boats can come on shore in the morning *, as easily as they could retire to the vessel to which they belonged,— it is not necessary either to carry casks or salt to sea,— or people for curing them ; all of which offices can be better and more frugally performed on shore by women, who would be busied at that work while the men refreshed themselves, where stores of casks and salt might always be kept in readiness to supply the fishermen as they should be wanted.

Nor would this method of fishing tend to supersede the use, or interrupt the trade of the *vent yaggers*, as they are called by the Dutch. These *vent yaggers* are a small light kind of vessels, built on purpose for sailing quickly, and act as tenders among the fishing-vessels at the beginning of the season, to carry the first caught fish as early to market as possible, when they always sell at a great price. If vessels of this sort were fitted out by private adventurers, they might as conveniently buy the fish as soon as caught by cruising along the British coast, and among the fishing-vessels, as they can do among the Dutch buffes. For, as these adventurers could always afford to give a much higher price to the fishermen than they could afterwards draw for them, they would

* The herrings are always caught during the night.

be very ready to hang out signals agreed upon, denoting the quantity of herrings they had on hand at every place at any one time, and be ready to put off their boats with them where necessary, by a signal from the *yagger*; so that by cruising within sight of the coast, all the caught fish could be picked up with the utmost facility.

A practice somewhat similar to this prevails with regard to the commerce of salmon on the coast of Scotland. In the beginning of the fishing-season, this kind of fish gives a great price in London, so that the fishmongers there employ a kind of swift-sailing vessels called *smacks*, to bring them as quickly to market as possible. The salmon intended for that market are boiled, and packed in small kits, as soon as taken; and the smacks succeed one another, running from north to south along the coast, and taking up on their passage all the boiled fish that are ready; and with these proceed directly for London,—where they are sold to very good account.

If then it should become a business for merchants to buy the fish when fresh caught from the fishermen, and to cure them on shore, and lay them up in stores for exportation, or any other use,—the fishermen would be necessarily freed of all the expence that would be required in providing casks and salt,—nor would be obliged to learn the nicer operation of curing them:—from which circumstances they would be at liberty to exert themselves to the utmost of their power in their own calling, without taking any concern about other matters, which does not so naturally belong to their business.—Thus each party would move in his own sphere with pleasure and profit, and mutually contribute to the good of the whole.

Another

Another circumstance that might tend to advance the British herring-fishery, would be the discovery of some new and more elegant way of curing them than any that are practised at present. It is reported, that the present method of curing herrings in Holland was discovered about the year 1397 by one *William Buckelsz*, or *Buchelen*, a native of *Bier Uliet*, whose name became so famous on that account, and his memory so much revered by his countrymen, that the Emperor Charles V. wanting to conciliate the good-will of his *Flemish* subjects, could not think of a more popular piece of condescension, than by making a journey in person to the isle of *Bier Uliet* to pay a visit to the tomb of this public benefactor to the country. It is now near four hundred years since that discovery was made, yet there is no reason to think that it has been in the smallest degree improved since that time, although there is little room to doubt, but that as great improvement might be made in this as in any other useful art.

It seems indeed a little extraordinary, that a country which depends so much upon its naval strength as Great Britain, and whose sailors therefore ought to have claimed a principal share of her concern,—should have made so few improvements in the important art of preserving viands for a long time sweet and wholesome. Our philosophers have made great discoveries as to the *antiseptic* power, and medical qualities, of various substances that might be employed, either alone, or mixed with others, for preserving food, without giving it that fiery scorbutic quality which it derives from common salt. Yet the practice of curing almost all kinds of flesh, and of every sort of fish that I know, except pickled salmon, with common salt alone, continues to be very universally followed. Herrings in particular are so overpowered with salt, as to become almost unfit for general use; and therefore

fore are assigned as food to the very lowest kind of people, and sold on that account at a very low rate.— In the present mode of curing them, I know of no market to which they are peculiarly adapted, save to that of the West Indies, where they are purchased for the negroes; — who, poor creatures, being allowed no other kind of salt, prize them chiefly on this account; employing them and their brine as a delicious seasoning to the other parts of their food. Ye who gorge on turtle and high-seasoned venison,— how can you bear the thoughts of seeing such a number of your fellow-creatures condemned to feed upon such nauseous fare, that they may minister to your luxurious desires!

Yet of all the fish that are drawn from the sea, the herring, in its original perfection, is perhaps the most delicious. And if cured by the help of less acrid antiseptics, which should not overpower its own native flavour, it might become a most agreeable delicacy, and as such be sought after through all the world: — on which accounts, a few thousand pounds offered as a premium by parliament, to be given to the person who should discover the most elegant preparation of this fish, which could be obtained at a moderate expence,— might be attended with the most beneficial effects to the community; — the premium to be determined by a jury of London aldermen, who should try the different parcels that should compete for it, after they had been returned from the West Indies; — each competitor to be at liberty to suggest what he thought the most elegant way of dressing the fish cured his own way; and the jury to be at liberty to cause their own cooks dress every sort in as great a variety of ways as they should encline. This might have somewhat the appearance of a ludicrous trial; — but if it were attend-
ed

ed with as great benefits to this nation, as the discovery of Buchelen has been of to the Dutch, we might well submit to be laughed at by all Europe, so that we might be allowed to reap the profits from it*.

I shall finish these observations with a few remarks on the whale-fishing, which lies more conveniently for the Scots adventurers than any others of Britain, and which has there been several times attempted with as little success as in other parts of the island. That this want of success in the British adventurers to the northern seas, must be owing to some defect in the manner of conducting the operations in Britain, cannot admit of a doubt, — seeing the Dutch are able to carry on a successful fishing in the Greenland seas without any national encouragement, while those in Britain find it a losing trade, although they receive such a bounty, as is alone nearly sufficient to pay the whole expence of the enterprise, if it were judiciously conducted. — Any attempt, therefore, to discover the causes that have counteracted the influence of this bounty, merits the attention of all wellwishers of the nation.

* This is a matter of more serious concern than some may be disposed to think it at first, and therefore deserves to be attended to. — A very trifling circumstance often makes the manufactures of one country shift to another; and when they have once changed places, it is no easy matter to bring them back again. — Sweden and Scotland long ago derived more benefit from the herring-fishery than any other nations; — but by the discovery that the Dutch made of a more agreeable way of curing them than was formerly known, their fish came to be preferred in every market; which enabled them to get the sole possession of that fishery, that has proved to them indeed a valuable gold-mine for several centuries. A like discovery by Britain at present, would effectually put her in possession of the fishery, which she might easily retain perhaps as long as she should continue a nation.

It is an observation that must have occurred to you before this time, that few undertakings have been much forwarded by high bounties.—Those of the herring and whale fisheries are striking proofs of this.—But that it is not the bounties themselves that occasion this retardment, but some injudicious arrangement that takes place in consequence of these bounties, will hardly be disputed.—No one will deny, but that a bounty of so much per ton upon every ship fitted out for the Greenland fishery in Holland, would rather encrease than diminish their profits on that fishing:—we must therefore enquire how it comes to produce this effect in Britain.

The first circumstance that here presents itself, is, that before the British parliament resolves to grant a high bounty for encouraging any new branch of commerce, the attention of the nation has, in some way or other, been strongly turned towards it.—Great are the national benefits that are expected to accrue from it; and the imagination of the multitude is buoyed up to the highest pitch with the hopes of private advantage that will result to individuals by engaging in it.—Hence innumerable societies start up in every corner, the members of which subscribe certain sums to be uplifted from each, and applied as a joint fund for prosecuting the undertaking.

In this manner numerous societies of merchants are formed by persons who know nothing about merchandise; and the management of the funds of this many-headed body is usually intrusted to some person who understands his own interest better than the greatest part of the members, and who acts in such a way as to forward that interest without the possibility of incurring any blame from those who are no competent judges when things are well

well or ill managed, so as that they have but a fair and plausible appearance.

While the generality of the persons who enter themselves as members of such societies, are men of fortune, who venture only a small part of their stock, about the success of which they are not materially interested;—a few, knowing how things of that sort are usually managed, subscribe from other motives, and usually know very well before they do so, in what manner they may make the loss of their small share turn out to their own profit. One man is perhaps himself, or has a near friend, in whose success he is involved,—a baker,—another is a brewer,—a third a smith,—a fourth a carpenter,—a fifth a ropemaker,—and so on;—when contracts come to be made for the company, the business usually comes in the way of those who have most friends in the direction at the time.—Hence all articles, instead of being bought the best cheap, are usually furnished at a very advanced price,—and of the very worst quality.—One man winks at one particular, in order that another may wink at another; so that the funds of the society are squandered away with an extravagant profusion, which the profits of the most gainful trade would not be sufficient to replace; and at the same time, from collusion, and other practices of that kind, accounts are made out so plausible, as to afford no room for a man who only spends an hour or two upon them in a year, to be able to perceive the smallest deficiency.

I do not say that these things have always happened, but I say that this is what may be naturally expected to take place in these circumstances, according to the common run of human affairs. And this may in part account for the failure of those great na-

tional undertakings, which, according to the common proverb, by becoming too general, *What is the business of every body, is neglected, as being the business of nobody*; so that no good need be expected to accrue from them.

But to come to the whale-fishing business in particular: The legislature here, as in most cases, by forming in their own mind an idea of the many benefits that would result to the individual undertakers, as well as the community at large, from employing large vessels in that trade, originally confined their premiums to those only of great burden*; — from which regulation has resulted many very uneconomical drawbacks. For,

In the first place, as adventurers who were wholly unacquainted with the nature of the Greenland trade, adopted the idea from the legislature, that large vessels were absolutely necessary for it; and as they foresaw that the expence of equipping and navigating a very large vessel would not be so great in proportion to her tonnage, as that of one of a smaller size, while the bounty could be claimed in proportion to the tonnage, it became a fundamental axiom among them, that the larger their vessels were, the greater would be their profits. They were therefore in all cases built as large as circumstances would admit of. But these vessels, by being too large for being commodiously employed in the common coasting-trade of the country, were obliged to be laid up for three fourths of the year, as a dead and decaying stock to the society.

In the second place, by drawing too much water for many of

* viz. To vessels of 200 tons burden or upwards.

the harbours to which they belonged, they could neither get out nor in to these but at the highest spring-tides; and if the wind proved unfavourable at that time, they were even then unable to get out; from which circumstance several vessels have lost their voyage, to the great loss of the company: and if they returned at an improper time, by being obliged to lie upon the coast till a spring-tide came, they were in danger of receiving damage if the wind shifted to an improper point; from which circumstance several of them have been driven on shore and wrecked, to the still greater detriment of the undertakers.

And, in the third place, these large vessels, even when they get to their place of destination among the ice, are in every respect worse fitted for carrying on the fishing to advantage, than a greater number of smaller ones, that might be fitted out at the same expence; as a little attention to the subject will, I hope, soon satisfy you.

In the Greenland seas, ships are very apt to be becalmed; in which case a large vessel is so unwieldy, as to be in danger of being carried away with a current, in spite of the feeble efforts of the boats to prevent it; whereas a small vessel is easier worked, or towed from danger by the boats, or staved off from the ice, in cases of necessity.—A large vessel, therefore, dares not venture so near the ice as one of more moderate burden, properly built, and judiciously rigged.

It is likewise observed by those who have been oftenest in these seas, that whales are usually found in companies, in some manner, inasmuch that one vessel which shall happen to be luckily stationed, shall see many more fish than she can possibly manage;
while

while another, at no great distance, shall not perhaps see one during the whole voyage. The greater the number of vessels, therefore, the greater number of chances they will have to fall in with the whales; and if they act in concert, so as to be regulated by certain signals, one ship of the company falling in with a proper station, may direct the whole fleet, so as to be benefited by her lucky chance. Any one who weighs the advantages that would accrue to the adventurers from this circumstance in a course of years, will be satisfied, that an inattention to this alone might sufficiently account for the little success the British whale-fishers have in general had. The Dutch, and especially the New-England fishers, the most expert and dexterous at present on the globe, are so sensible of the advantages that are derived from this circumstance, that although particular persons will sometimes fit out only one moderate-sized ship as their whole venture, yet I am told they never sail alone, but associate themselves with some others, equally independent as themselves, with whom they sail in squadrons, greater or smaller, as particular circumstances occasion, agreeing among themselves as to signals, and other particulars that may occasion disputes.

For these reasons it would seem that our legislature, by confining their bounty to ships only of a very great burden, have directed the whale-fishing into an improper channel, which must have greatly diminished the profits of the several adventurers.

This error seems to have been at length discovered, and is in some measure corrected by the statute 15th George III. cap. 31. which extends the bounty to vessels under two hundred tons burden, and grants a bounty for no more than four hundred tons for any one vessel, of whatever size above that she may be. This
judicious

judicious alteration will no doubt be in time attended with beneficial consequences.

The profits of the adventurers in the whale-fishery have, likewise, no doubt, been greatly diminished by the little, or rather no interest, that the captains of the ships, and mariners employed, have in the adventure. For as these are usually engaged for the voyage, and are paid a certain stipulated sum as wages, which is the same whether the voyage has been successful or the reverse, it may be expected that they will give themselves little trouble in discovering the easiest and most effectual means of promoting the interest of their employers: and as it often happens that a captain is appointed by the particular interest of some of the members of the company, rather than because of his own merit, it may often happen also, that he is neither very well qualified for the voyage, nor acquainted with the crew he is to command; some of whom, by being long employed in that trade, may be more knowing than himself, and whom he treats in a haughty manner; from which circumstance variances arise between them, and every one is rather desirous to retard than to promote the success of the fishery, hoping that the blame may be thrown upon the opposite party. Thus are the society presented with jarring memorials and mutual complaints, in lieu of the money that ought to fill their coffers *. In these circumstances, what man of common sense can ever hope to see any mercantile enterprise carried on with success.

It is perhaps doubtful, if, after the many unsuccessful attempts

* I have had particular occasion to see this realized on several occasions.

that

that have been made to carry on the whale-fishery by *joint company stocks*, private adventurers would be easily prevailed with to venture on the undertaking, even if the legislature should adopt a better method of encouraging them: — yet if ever the nation should become rich and flourishing, in consequence of the general security of the subject, the encouragement of agriculture and manufactures, and the other means above recommended; as the capital stock of the people encreased, it would force adventurers to devise means of employing that stock to the greatest advantage; in which circumstances it would hardly be possible to prevent those of Scotland from engaging in the whale-fishing with spirit and success. To assist them in their first enterprizes, the following particulars are all that seem to be necessary to be attended to.

Let government continue the same bounty on British-built ships employed in the Greenland fishery, as at present per ton *, without any limitation of burden, to be paid to every vessel which sails to the Greenland seas at the proper season, goes to the station, and returns in a proper time; without any other conditions, excepting that the said vessel, from the time of her sailing till she return, shall have been in no harbour, unless put in to it by stress of weather, or to refit, or buy necessaries, where she is to remain no longer than absolutely necessary, and to take on board no goods whatever, nor pursue any other design or view of profit; — these circumstances to be verified by the oath of the

* By the last quoted law, which is still in force, the bounty before Christmas 1776 was 40 s. per ton. — From Christmas 1776 to 1781, it is 30 s. per ton; and from 1781 to 1786, when the act expires, it is only 20 s. per ton. I can perceive no good reason for diminishing the bounty so suddenly, before it is known whether or not it will produce the desired effect.

master, and any part of the ship's company, if thought necessary *; — but if it shall be discovered by any means afterwards, that the master shall have given a false report, the penalty to be

* In all the laws hitherto enacted in Britain for granting a bounty on vessels employed in any kind of fishings, the legislature seems to have been extremely solicitous to prevent any person from claiming the bounty, unless they were provided with every thing that could be thought necessary for carrying on these fisheries in every possible situation of things; and hence they have been at great pains to prescribe the number of nets, lines, salt, casks, men, provisions, &c. to be on board of every such vessel before it could be entitled to the bounty; and also to regulate the ports from which they are to sail, and many other particulars, which seem quite unnecessary, as they only operate like so many clogs to retard the business they seem evidently intended to encourage, and to enhance the price of the articles that they ought to diminish.

The design of a bounty in all cases of this sort ought to be to encourage inexperienced adventurers to engage in a particular branch of business with which they are unacquainted; but which it is supposed might be carried on without the bounty, with profit, as soon as it came to be fully understood, and the business conducted with œconomy.

If that bounty, therefore, is not so high as to be alone sufficient to defray the expence of the equipment, and thus to tempt a man to fit out a vessel merely with a view to obtain the bounty, without attending at all to the business, there seems to be no reason to fear that any person would send a vessel a voyage of this sort, without an apparatus proper for the purpose; as they must otherwise inevitably be losers by the business, and therefore quickly give it over; so that in this case there would be no necessity for prescribing particular rules for their conduct.

And if an adventurer finds that he cannot be fully indemnified by the bounty, and therefore must exert himself when in the proper station for fishing, he will find, that his profits will be so much diminished, if he wants a proper apparatus, as to be obliged of his own accord either to provide a proper apparatus, or give over the business.

But if he is left at liberty to chuse for himself, he will always make choice of that apparatus that will effect the purpose required at the *smallest possible* expence.

— Ingenuity will be exerted to discover new methods of saving money; as every

be forfeiture of the ship and bounty, with treble the value of that bounty; to be recovered first from the ship-master, and failing him, from the owners of the vessel;—the master in such cases to be imprisoned till these damages shall be recovered, without a possibility of obtaining his liberty, and to be ever afterwards liable to the owners in the whole sums forfeited by them, unless he acted by their orders. It is reasonable, that where the conditions may be so easily complied with, the national bounty should not be misapplied; and therefore such high penalties ought to be exacted.—For the security of owners, who might thus be ruined without any blame on their part, by the duplicity or malevolence of the master, it is highly necessary that he should in all cases be involved in their ruin. The last clause would effectually prevent frauds on that head.

Were such a law as this to be enacted, private persons, owners of ships, in times of dead trade, when little profit could be made of their vessels otherwise, would naturally turn their attention towards the Greenland fishery. They would find, that they could,

such contrivance will augment his profits; by which means the undertakers will in time be able to catch the fish at as small an expence as any other nation, and by consequence will afford them as cheap at foreign markets as any others can do. This surely is, or ought to be, the aim of every bounty whatever.

For these reasons, it appears to me a self-evident truth, that it is altogether superfluous in the legislature to express such anxiety, lest their bounty should be bestowed on undeserving persons; as all the conditions invented to prevent this, only tend to retard the improvement of the fishery, which might be more perfectly effected by moderating the bounty, where it is too high, a small degree.

The only circumstances that seem to be reasonably exigible are, that the vessels be British built, and that they remain a proper time upon the station: all other particulars might perhaps, with safety, be left to the choice of the persons concerned.

almost

almost without any expence, make a voyage to these seas ; as the bounty would indemnify them for almost the whole of that : and if any of those should prove successful, which could hardly fail to be the case where the master was part-owner of the vessel, it would encourage others to try their fortune in the same way, when they were in the least at a loss how to find employment.

In this manner the fishing would begin, rather as a by-job, to keep private persons from being idle, than from being considered as a serious trade.— But no sooner would they find that profit was reaped from it, than it would become a serious object with trading people of some capital and enterprise, by whom alone it could come to be carried to its full perfection.

No sooner would one or two merchants engage in this business as a serious object of trade, and fit out a small fleet to act in concert with one another, than their extraordinary success would not only induce themselves to extend that branch of trade as far as they could, but would also teach private independent adventurers, that if they hoped to reap the full profit from that trade which might be drawn from it, they must also associate with one another, so as to make their several vessels act in concert with one another also.

But as those masters of vessels who were part-owners also, would not wish to be brought in to share in their profits alike with all the other ships that might be in company with them, and would rather be desirous that each vessel should reap what profit she could from her own superior industry or good fortune, they would find themselves under a sort of necessity to form articles of general association before they went on the voyage, in which as-

fociation signals should be agreed upon for all cases in which they should be judged necessary, and rules established by which all disputes that might arise between the several independent vessels of the fleet should be determined; every vessel that belonged to the persons so associating, to be bound to abide by these rules during that particular voyage; — but in all cases not included in these rules, to act each for her own independent profit, according to justice. It would be necessary that a law should be made, declaring, that these associations, legally drawn out upon stamped paper, and formally signed by the contracting parties, should be considered by judges as binding upon the parties during their continuance, in case of any disputes that might arise.

It would soon be found by all these adventurers, that instead of paying the men an exact limited sum for the voyage, or per month, which should be the same in all cases, whatever were the success of the voyage, it would be much more for their interest to contrive to make the amount of the emoluments of the persons on board depend upon the success of the fishing, raising or falling with the profits of the owners. At the beginning it would be necessary to allow them fixed wages, to ensure them of something in case of a total want of success, without which they would not be prevailed with to go; — but, over and above that, it would be necessary to give certain premiums for encouragement. Thus, for every whale caught,—to the captain, the sum of to each harpooner to each common sailor and so on, proportioning the amount of the several sums to the importance of the station that they occupied in the ship.—Besides that, there ought to be a good premium allowed to the person on board of such a ship who first discovered any whale that should be killed; — another premium to the man who should strike her with

with a harpoon;—and so on for every other important piece of service that required more than ordinary diligence, intrepidity, or labour. In this way every person on board would find his own interest promoted by his diligence and skill, as well as by that of his associates. A master would find, that much of the profits of his voyage depended upon the skill and diligence of his crew, and would therefore be anxious to secure the best hands he could.—Those under him would likewise find, that the master, by his alacrity and diligence, contributed also to the benefit of all his ship's company; such a one would therefore be most prized by the sailors. This would recommend him to his employers.—Skill and good behaviour would thus become in all parties the only certain method of obtaining high profit;—and this would necessarily make the several persons concerned become masters of their business, and assiduous in the discharge of their employment, which are the only possible means of securing to this country any permanent advantage in the fishing.

There can be no doubt but that Britain, by a plan of conduct similar to this, would in time come to carry on the whale-fishery with as great profit as the Dutch or New-Englanders, even without any aid from government.—But the circumstance that would give her the most decided advantage over all other nations in this fishing, would be to unite it with that of the herring-fishery; as these two could co-operate to promote the interests of one another in the happiest manner that could be imagined.

I purposely reserved till this occasion the mention of another drawback that the whale-fishers have always had to struggle with, viz. the high wages of the persons employed in that voyage. As these persons can only be employed for a few months in the voyage to Greenland; and as this happens to be at the busi-
fiest

fiest season for the coasting-trade, the persons so employed are in some measure thrown out of business for the remaining part of the season; on which account they require, and obtain, much higher wages than would be necessary, were they to be kept in constant employment during the whole season.

Instead, therefore, of laying these commodious vessels up in the harbour to rot, as they do at present, let us suppose that they unladed their blubber, &c. put ashore the apparatus of the Greenland fishery with the utmost expedition,—and took on board tackle, &c. for the herring-fishery, and immediately proceeded to the western coast for that purpose. The same number of hands,—and the same boats that are fitting for the one fishery, are nearly equally proper for the other;—and if the vessels that came from Greenland were not of too large a size, they would be perfectly well adapted to the herring-fishery*. The only inconvenience that could possibly arise from this arrangement would be, that the whole ships would usually be a little too late for the earliest fishing-season, as the Greenland ships could seldom come home in time to be at any of the places of rendezvous before the 22d of June; but they would have no difficulty in reaching the rendezvous before the 1st of October, and of thus being entitled to claim the bounty for the second fishing-season.

Instead, however, of fixing the time of rendezvous precisely to two particular days only, I can see no inconvenience that would

* No vessel should be entitled to draw a premium for more than 80 tons, (if such is found to be the largest vessel necessary for the herring-fishery), whatever was her burden above that.

result from allowing any ship to enter to the fishing at any intermediate day between the 22d of June and 1st of October each year; — the collector or comptroller of the customs at the place of rendezvous giving a paper to the shipmaster, specifying the particular day when every such ship appeared at the rendezvous; from which date, the ship should be obliged to continue following the fish for the space of three months at least, or to the 11th day of January following, unless she had sooner completed her loading, before she could be entitled to the bounty. This would have the good effect to allow such vessels as were intended to be employed in the herring-fishery during the proper season, to pursue any other profitable employment at other times without restraint; and not lose any time, after having completed any other voyage, before they proceeded directly to the fishery, if at the proper season. In this manner the profits of the several owners of vessels, adventurers in this trade, would be greatly encreased; and by consequence, they could afford to sell their fish much cheaper, in any market than they can do at present; which is the great point that ought ever to be aimed at. The law ought to aim at encouraging every æconomical saving, and should therefore studiously remove every unnecessary bar out of the way of the adventurers.

If this liberty should be granted, it would be a strong encouragement to every adventurer; but it would be in a particular manner favourable to those employed in the Greenland fishery. For they would be at perfect liberty to remain in the northern seas as long as they found it profitable and safe for themselves to continue there; and as soon as they could unload at home, and take on board their fishing-tackle, could proceed immediately to the herring-fishery without losing a day, (and the loss of time to them

them who are obliged to have such a number of hands is of great moment). There they could employ themselves till they had completed their loading, or till the time was elapsed which entitled them to the bounty, and then would be at liberty to proceed on any profitable voyage without loss of time.

To facilitate both these trades, it would be found extremely convenient to establish a sort of *entrepôt* or staple at Braffa sound in Shetland, which would be directly in the road of the Greenland ships to the herring-fishery. There they might conveniently unload their whale fins, blubber, &c. where it might be refined by the natives, while the ships were employed in the fishery. This would give spirit and activity to the natives of these northern isles; and would soon make that a great and a flourishing place, as it would be here that the Greenland herring-fishers could most economically take on board their nets and stores for the herring-fishery; and here also it would be most convenient for the Greenland ships universally to rendezvous, and to take on board their stores before they proceeded on their voyage. I need not point out the manifold advantages that would result to that part of the country from this arrangement.

According to this plan, not an hour would be lost from the time that the Greenlandmen proceeded on their voyage to the northern seas, till they had completed their herring-fishery for the season. And whenever that fishing was over, these stout vessels would be immediately at liberty to take on board a cargo of herrings, and, without returning home, they might (having put on shore their superfluous hands, who could during winter be employed in mending nets, repairing their fishing-tackle, harpoons, &c. to be ready by the time the vessel returned) proceed

ceed directly to Portugal, Spain, or the Straits, to dispose of it. From whence they could return with their loading just in time to take in their stores, and proceed again on their Greenland voyage.

Thus would begin anew their never-ceasing round of useful employment, which could not fail to benefit the country in the highest degree, and breed up an amazing number of hardy seamen, who would be ready to carry the British thunder 'round the globe whenever the exigencies of the state might require it, and make our little spot the envy, the astonishment, and the terror of all surrounding nations.

Would to God she could thus acquire power without ambition; and that, contented with her own territories, and with availing herself to the utmost of her own internal advantages, she should neither covet the dominions of another, nor endeavour to cramp their trade by unjust restrictions, or to disturb their quiet by unnecessary exertions of power. Then would she be beloved and revered by all mankind, and promote in the highest degree the common felicity of the whole inhabitants of the globe! But vain are these wishes. Sooner shall the shadow be driven from its substance, than the heart of man, when elated by power, submit to be circumscribed by the feeble dictates of beneficence and humanity. Pride will ever trample the weak in the dust; and ambition aspire at extended dominion. Thus does man pervert the blessings of Heaven, and employ them on all occasions to the hurt of his fellow-creatures. The sympathetic heart turns with aversion from this scene of criminal enjoyments, and unsatisfactory delight, and says to itself, If this is the perfection of that

rational nature which exalts man above the other creatures of God, all is indeed vanity and vexation of spirit.

That you, my dear Sir, may be often enabled to revel in the fairy fields of imaginary improvements, so as to lose sight as much as possible of the *real* and less pleasing scenes transacting around you, is the sincere prayer of your ever affectionate friend and humble servant.

A P-

A P P E N D I X.

N U M B E R F I R S T.

AS the ancient monies in Great Britain have been mentioned several times in the foregoing letters, that the reader may be enabled, at one view, to perceive the value of them at any particular period, the following tables are subjoined.

It deserves to be noted, that when the monies of both England and Scotland obtained their present appellations, a pound of money contained literally a pound-weight of silver, or twelve ounces *Troas* weight, of the usual alloy. This standard, however, was from time to time altered; so that, at different periods, the same nominal sum contained very different quantities of silver; which occasions many hasty readers to form very inadequate ideas of the real or comparative value of any commodity that may be mentioned in former times. By the industry of the ingenious Messrs. Loundes and Fleetwood, the following table, of the several variations that have taken place in the coins of England, have been collected; and we are indebted to the very ingenious Mr Ruddiman for that of the Scots coins.

T A B L E I. *

Shewing into how many pounds, shillings, and pence, a pound-weight of silver hath been coined at various periods, with the proportion of alloy that it contained.

In ENGLAND.					In SCOTLAND.				
A.D.	Reign.	F.	S.	Alloy.	Tale.	A.D.	Reign.	F.	S.
		oz. dw.	oz. dw.	s. d				oz. dw.	oz. dw.
	Before Edw. I.	11	2	0	18	20	0		
1299	28 Edw. I.	11	2	0	18	20	3		
1346	20 Edw. III.	11	2	0	18	22	6	1366	37 David II.
1353	27 Edw. III.	11	2	0	18	25	0	1367	38 David II.
1421	9 Henry V.	11	2	0	18	30	0	1373	3 Robert III.
1422	1 Henry VI.	11	2	0	18	37	6	1432	9 James I.
1425	4 Henry VI.	11	2	0	18	30	0	1450	9 James II.
1460	19 Henry VI.	11	2	0	18	37	6	1455	14 James II.
1509	1 Henry VIII.	11	2	0	18	45	0	1474	15 James III.
1542	14 Henry VIII.	10	0	2	0	48	0	1482	23 James III.
1544	36 Henry VIII.	6	0	6	0	48	0	1529	16 James V.
1545	37 Henry VIII.	4	0	8	0	48	0	1554	13 Mary,
1549	3 Edw. VI.	6	0	6	0	72	0	1564	23 Mary,
1551	5 Edw. VI.	3	0	9	0	72	0	1571	4 James VI.
1552	6 Edw. VI.	11	1	0	19	60	0	1577	10 James VI.
1554	2 Mary,	11	0	1	0	60	0	1579	12 James VI.
1559	2 Elifabeth,	11	2	0	18	60	0	1581	14 James VI.
1600	43 Elifabeth,	11	2	0	18	62	0	1597	30 James VI.
Since which it hath continued the same both as to weight and fineness.						1601	34 James VI.	11	0
						1659	19 Charles II.	11	2
						Since which it hath continued the same both as to weight and fineness.			

* This Table is divided into two parts; one for England, and one for Scotland: and each of these parts is subdivided into five columns; — containing,—1. The Year; — 2. The Reign; — 3. 4. The weight of *Fine Silver*, and of *Alloy*, in ounces and penny-weights; — and, 5. The *Tale*, in shillings and pence.

To enable the reader the more easily to compare the value of any sum of money formerly with the same sum at present, the following table, constructed from the foregoing, is added.

T A B L E

T A B L E II. *

Shewing the comparative value of the coins in *England* and *Scotland*, with the several alterations they have undergone, from the earliest accounts to the present time.

One pound of money at the following periods.

In ENGLAND.				In SCOTLAND.			
A.D.	Reign.	F. S. Grains.	Pref. Val. L. s. d. f	Reign.	F. S. Grains.	Pref. Val. L. s. d. f	
	Before Edw. I.	5328.00	3 2 0 0	Before Rob. I.	5328.00	3 2 0 0	
1299	28 Edward I.	5262.22	3 1 2 3				
1300	—	—	—	Robert I.	5074.20	2 17 10 2	
1346	20 Edward III.	4736.00	2 15 1 2	—	—	—	
1353	27 Edward III.	4262.40	2 9 7 0	—	—	—	
1366	—	—	—	37 David II.	4262.00	2 9 7 1	
1367	—	—	—	38 David II.	3637.72	2 2 4 0	
1373	—	—	—	3 Robert III.	3330.00	1 18 9 0	
1421	9 Henry V.	3552.00	2 1 4 0	—	—	—	
1422	1 Henry VI.	2841.60	1 13 0 3	—	—	—	
1425	4 Henry VI.	3552.00	2 1 4 0	—	—	—	
1432	—	—	—	9 James I.	2841.60	1 13 0 3	
1450	—	—	—	9 James II.	1665.00	0 19 4 2	
1455	—	—	—	14 James II	1110.00	0 12 11 0	
1460	39 Henry VI.	2841.60	1 13 0 3	—	—	—	
1474	—	—	—	15 James III.	740.00	0 8 7 1	
1482	—	—	—	23 James III.	761.14	0 8 10 1	
1509	1 Henry VIII.	2368.00	1 7 6 2	—	—	—	
1529	—	—	—	16 James V.	550.00	0 6 4 3	
1542	34 Henry VIII.	2000.00	1 3 3 1	—	—	—	
1544	36 Henry VIII.	1200.00	0 13 11 2	—	—	—	
1545	37 Henry VIII.	800.00	0 9 3 3	—	—	—	
1549	3 Edward VI.	800.00	0 9 3 3	—	—	—	
1551	5 Edward VI.	400.00	0 4 7 3	—	—	—	
1552	6 Edward VI.	1768.00	1 0 6 3	—	—	—	
1554	2 Mary,	1760.00	1 0 5 3	13 Mary,	406.00	0 4 8 3	
1559	4 Elifabeth,	1776.00	1 0 8 0	—	—	—	
1564	—	—	—	23 Mary,	293.00	0 3 5 0	
1571	—	—	—	4 James VI.	258.00	0 3 0 0	
1577	—	—	—	10 James VI.	244.20	0 2 10 0	
1579	—	—	—	12 James VI.	240.00	0 2 9 2	
1581	—	—	—	14 James VI.	220.00	0 2 6 3	
1597	—	—	—	30 James VI.	176.00	0 2 0 3	
1600	43 Elifabeth,	1718.7	1 0 0 0	—	—	—	
1601	—	—	—	34 James VI.	146.60	0 1 8 2	
1659	—	—	—	19 Charles II.	143.2	0 1 8 0	

* This table is divided into two parts; one for England, and one for Scotland: and each of these parts is subdivided into four columns; — containing, — 1. The Year; — 2. The Reign; — 3. The weight of *Fine Silver* in grains; — and, 4. The present value in British pounds, shillings, pence, and farthings.

In the above table I have chosen, not only to express the value of a pound of money at each period that any alteration took place, in Sterling money at present; but have also marked the grains of pure silver contained in such pound of money at each period, that the reader may be enabled, with little trouble, to convert any sum that may be mentioned at any period of British history into present Sterling money; which may be done with the greatest facility by means of the following table.

T A B L E III.

Shewing the number of grains of pure silver contained in the different kinds of money in Great Britain, from one farthing to a thousand pounds Sterling.

<i>Sterling. Farthings.</i>	<i>Grains.</i>		<i>Sterling. Shillings.</i>	<i>Grains.</i>		<i>Sterling. Pounds.</i>	<i>Grains.</i>
1	1.790	✱	1	85.93	✱	1	1718.709677418
2	3.580	✱	2	171.87	✱	2	3437.419354836
3	5.370	✱	3	257.80	✱	3	5156.129032254
<i>Pence.</i>		✱	4	343.74	✱	4	6874.838909672
1	7.161	✱	5	429.67	✱	5	8593.548387090
2	14.322	✱	6	515.61	✱	6	10312.258064508
3	21.483	✱	7	601.54	✱	7	12030.967741926
4	28.645	✱	8	687.48	✱	8	13749.677419344
5	35.806	✱	9	773.41	✱	9	15468.387096762
6	42.967	✱	10	859.35	✱	10	17187.096774180
7	50.129	✱	11	945.29	✱	20	34374.193548360
8	57.290	✱	12	1031.22	✱	30	51561.290322540
9	64.451	✱	13	1117.16	✱	40	68748.387096720
10	71.612	✱	14	1203.09	✱	50	85935.483870900
11	78.774	✱	15	1289.03	✱	100	171870.967741800
<i>Shillings.</i>		✱	16	1374.96	✱	200	343741.935483600
1	85.935	✱	17	1460.90	✱	300	515612.903225400
		✱	18	1546.83	✱	400	687483.870962200
		✱	19	1632.77	✱	500	859354.838709000
		✱			✱	1000	1718709.677418000

Directions

Directions for the use of these Tables.

When you want the value of any sum at any particular period, by looking at Table II. you see how many grains of pure silver was contained in a pound of money at that time; which being multiplied by the number of pounds specified, shows the number of grains of silver contained in the whole sum.

To reduce this into present Sterling money, look at Table III.; and having subtracted the sum next below it in that table from your total amount, the index opposite to it will point out the nearest whole sum in Sterling money. If there is any quotient, look again into the table, and subtract the next nearest sum, whose index will point out the value in Sterling money; and so on, continually subtracting the quotient, you obtain the smaller sums contained in it to the value of a farthing.

E X A M P L E S.

In the year 1316 a quarter of wheat sold in England at L. 4; what would be the value of that quarter of wheat in the present money of Great Britain?

By Table II. it appears, that in the year 1316 the pound of money in England contained 5262.22 grains of pure silver; so that L. 4 contained 21048.88 grains; which may be reduced to the present money of Britain by the help of Table III. thus.

L. 10 0 0 0	-	21048.88
		17187.09
		3861.79
2 0 0 0	-	3437.41
		424.38
0 4 0 0	-	343.74
		80.64
0 0 11 0	-	78.77
		1.87
0 0 0 1	-	1.79
L. 12 4 11 1		8

So that wheat at that time sold for twelve pounds four shillings and eleven pence one farthing per quarter of the present money of Great Britain; that is to say, the four pounds then contained as much silver as would have amounted to that sum if coined in our mint at present.

If the sum you want to ascertain does not consist of an even number of pounds, the shillings may be thus reduced. Divide the number of grains of which the pound consisted at that time by 20, which gives the number of grains in a shilling; and then multiply that by the number of shillings whose value you want to obtain.

E X A M P L E.

In the year 1346 wheat sold for two shillings per quarter. Now at that time, by Table III. it appears, that the pound contained 4736 grains; therefore

$$\begin{array}{r}
 20)4736(236.8 \\
 \underline{40} \qquad \underline{2} \\
 73 \quad 473.6 = \text{to 2 s. at that time.} \\
 60 \quad 429.6 = \text{L. } 0 \quad 5 \quad 0 \quad 0 \\
 \hline
 136 \quad 44.0 \\
 120 \quad 42.9 = 0 \quad 0 \quad 6 \quad 0 \\
 \hline
 16.0 \quad 1.1 \\
 16.0
 \end{array}$$

0 5 6 0 of our present money.

If the fractions go as low as pence, they may be reduced into grains, either by dividing the shilling by 12, or the pound by 240, and then multiplying by the number of pence.

E X A M P L E.

In the year 1269 wheat sold at L. 6 : 8 : 4 per quarter, — required the present value in Sterling money.

In

In 1269 the pound contained 5328 grains of pure silver, therefore

	5328 6	and 20) 5328 (266.4, and 12) 2664 (22.2
		40 8 24 4
	31968 grains in 6 l.	132 2131.2 26 88.8
	2131.2 grains in 8 s.	120 24
	88.8 grains in 4 d.	128 24
	34188.0	120 24
L. 10 0 0	17187.09	80
	17000.91	80
9 0 0	15468.38	
	1532.53	
0 17 0	1460.90	
	71.63	
0 0 10	71.61	
L. 19 17 10	.03	

a quarter of wheat was worth L. 19 : 17 : 10 of our present money.

In old times it was customary to express almost all great sums by marks rather than by pounds. Where this occurs, the grains contained in a mark may always be found by dividing the pound at that time by three and multiplying by two; a mark having been at all times exactly two thirds of a pound, or eight ounces.

E X A M P L E.

In the year 1244, Henry III. of England found, that the Pope at that time drew annually out of England 60,000 marks. What would be the value of this in pounds Sterling at present?

At that time the pound contained 5328 grains, therefore

3) 5328 (1776	
3	2
23	
21	3552
22	60000
21	
18	213120000.

carried forward

		Brought forward	213120000.
L. 100000	o o	-	171870967.74
			41249032.26
20000	o o	-	34374193.54
			6874838.72
4000	o o	-	6874838.70
L. 124,000	o o		.02

60,000 marks then was equal to L. 124,000 Sterling at present.

The reader who is not much conversant in decimal arithmetic, may perhaps be at a loss clearly to understand the above example.— Let him then be told, that any sum may be multiplied or divided by ten by adding or taking away one figure at the right-hand side of the number.— Keeping this in his mind, let him look into Table III. he will find opposite to L. 10 the number 17187.096774; but the number 17187 is four figures short of the number 213120000, which he was in search of. Remove, therefore, the decimal point four figures to the right, and it becomes 171870967.74; and the index 10, having four figures added to it, becomes 100000.

In the same manner the next quotient requires the decimal point to be removed three figures to the right-hand; so that 20 now becomes 20000; — and the next number 40, by the addition of two cyphers, becomes 4000; so that the whole amounts to L. 124,000.

It was to enable the reader to find out any large sum without multiplication, that the decimal figures were carried to such a depth: for by removing the decimal point one figure back, it comes to express just ten times its former value; so that the sum opposite to one pound, may be made to express any whole sum beginning with the figure 1 as under.

1	-	-	1718.709677418
10	-	-	17187.09677418
100	-	-	171870.9677418
1,000	-	-	1718709.677418
10,000	-	-	17187096.77418
100,000	-	-	171870967.7418
1,000,000	-	-	1718709677.418
10,000,000	-	-	17187096774.18
100,000,000	-	-	171870967741.8
1,000,000,000	-	-	1718709677418.

and

and in the same manner may the figures 2. 3. 4. &c. be made to express any sum beginning with either of these figures, without any farther trouble but that of adding as many cyphers to the right-hand side of the index, as you find it necessary to remove the decimal point backwards.

This being premised, I shall add a few other examples that may serve to amuse the reader a little, and make this subject somewhat more familiar to him.

It is remarked by historians, that David I. of Scotland endowed religious houses during his own reign to the amount of L. 60,000 a-year.—This was besides what had been endowed before his time.

To ascertain the real value of that sum, we must remember, that the pound in Scotland at that time as well as in England, contained 5328 grains of fine silver, therefore

	5328
	60000

	319680000.
L. 100,000	171870967.74

	147809032.26
80,000	137496774.19

	10312258.07
6000	10312258.06

L. 186,000	.01

he granted to the clergy L. 186,000 above what they formerly enjoyed.

The whole revenues of the clergy in Scotland at present hardly amount to L. 60,000; so that this prince alone gave away to upwards of thrice that amount, besides what had been allotted to them formerly.— And if it be supposed that money then was about three or four times the value it bears at present, we may reasonably compute, that the revenues of the clergy in Scotland at that time could not be short of L. 500,000 Sterling.

Anno 1269, Alexander King of Scotland refused to allow the Pope's Nuncio to come into his kingdom, or levy any money for the purpose of the Holy wars;

wars ; — but, of his own free gift, sent a present to the Pope of a thousand marks for that purpose.

At this time the pound of money in Scotland contained 5328 grains ; therefore

		3) 5328 (1776	
		<u>3</u>	2
		23	
		<u>21</u>	3552
			1000
		22	
		<u>21</u>	
		18	3552000
L. 2000	0	0	- - 3437419.03
			114580.97
60	0	0	- - 103122.58
			11458.39
6	0	0	- - 10312.25
			1146.14
0	13	0	- - 1117.16
			28.98
0	0	4	- - 28.64
L. 2066	13	4	.34

the amount of it in the present money of Britain was L. 2066 : 13 : 4 Sterling.

In the year 1354 the exports from England of wools, and woollen manufactures, were as under, viz.

	L.	s.	d.
Thirty-one thousand six hundred fifty-one facks and a half of wool, at L. 6 value each fack, amount to	189909	0	0
Three thousand thirty-six hundred sixty-five felts, at 40 s. value each hundred, at six score, amount to	6073	1	8
Whereof the custom amounts to	81624	1	1
Four thousand seven hundred and seventy-four cloths and an half, at 40 s. value each cloth,	9549	0	0
Eight thousand sixty-one pieces and an half of worsted, after 16 s. 8 d. per piece, is	6717	18	4
Whereof the customs amount to	215	13	7
Total exports of wool and woollen goods,	L. 294088	14	8
			At

At this time the pound contained 4262.4 grains of pure filver ; therefore

29408 8	and 20)	4262.4	(213.12	and 12)	213.12	(17.76
4262.4		40	14		12	8
117635.2		26	852.48		93	142.08
588176		20	2131.2		84	
1764528						
588176		62	2983.68		91	
1176352		60			84	
1253520691.2		24			72	
2983.68		20			72	
142.08						
1253523816.96		40				
1203096774.19	-	40				
			L. 700000	0	0	
50427042.77						
34374193.54	-		20000	0	0	
16052849.23						
15468387.09	-		9000	0	0	
584462.14						
515612.90	-		300	0	0	
68849.24						
68748.38	-		40	0	0	
100.86						
85.93	-		0	1	0	
14.93						
14.32	-		0	0	2	
61	-		0	0	0	
			L. 729340	1	2	

the woollen exports then amounted to L. 729,340 : 1 : 2 of our present money.

If it be supposed that the same weight of filver was three times the value as at present, the above sum would be equal to L. 2,188,020 : 3 : 10½ now ; which will tend to show that the trade of England at that time was not nearly so insignificant as is generally imagined.

In

In the year 1548 wheat sold for 6 s. 8 d. per quarter; but at that time the pound contained 800 grains of fine silver; therefore

	20) 800 (40 and 12) 40 (3.333	
	80 6 36 8	
	00) 240	40 26.664
	26.66	36
	266.66	40
L. 0 3 0 0	- - 257.80	36
	8.86	40
0 0 1 0	- - 7.16	36
0 0 0 1	- - 1.70	4
L. 0 3 1 1		

the quarter of wheat at that time, cost only 3 s. 1 d. 1 f. of the present money of Britain.

Again, in the year 1455, wheat sold at 1 s. per quarter; but in that year the pound contained 3552 grains of fine silver; therefore

20) 3552 (177.6	the grains in one shilling anno 1455
20 171.87	= 2 shillings at present.
155 5.73	
140 5.37	= 3 farthings.
152 .36	2 s. 3 farthings present money.
140	
120	
120	

the quarter cost 2 s. 3 f. of the present money of Britain.

I might produce many other examples to shew the utility of these tables; but it is imagined these already produced, will be sufficient to shew the reader in what manner he himself may apply them to any purpose that occurs.

N U M.

N U M B E R S E C O N D.

Copy of a letter which appeared in the Weekly Magazine, October 27. 1774, complaining of the insolence of customhouse-officers in the Western Isles.

S I R,

BEing a constant reader of your Miscellany, and observing the spirit of emigration, which seems to be epidemic through Great Britain and Ireland, I have often seriously revolved in my mind what could be the source of this disorder, that is likely, in no distant period, to depopulate the mother-country, and leave our ancient kingdom the resort of owls and dragons, and other solitary animals, who shun the light, and seem displeased at the human race. Ancient Babylon, for its crying iniquities, assailed my thoughts, and I deplored the ruins of that once mistress of the world. I have ruminated on the various causes of this calamity described in your Magazine, and sometimes been ready to adopt one or other of them for the ground-work, *to wit*, Levity, Ambition, Caprice, or Oppression, from the landed gentry: yet so inherent is the love of country, so prevalent the habits and familiarity of friends, so pleasing the prospect of enjoying peace and ease amidst one's family and connections, and withal, to me, so alluring is a quiet and domestic life, that I am apt to think none of the three first-mentioned passions would have efficacy with old age to remove themselves and families to such a distance as the continent of America, to brave the wild Atlantic, and expose a beloved wife and infant children to the boisterous element, and rigorous inclemency of seasons, not to mention the attacks of savages, which sometimes are to be dreaded.

I at last fixed on Oppression; which, Hydra-like, makes its appearance in our land under various shapes.—Not many months ago, a king's yacht made her appearance in the northern islands where I sojourn: the design of entrapping all contraband and prohibited goods gave me little concern, as that was an article I never in my life dealt to any extent in, or with the smallest views of
of

of profit. I happen to have a numerous small family, who, on the common report of rude behaviour sometimes exercised by the petty officers vested with commissions, were under alarm, and clung to me with panic fears. I soothed them the best way in my power, and told them the truth, that I had nothing to dread, and expected no insults. Soon thereafter, a row-boat came in sight; and, upon landing, one of the crew, naming himself their chief, but not to be distinguished otherwise than by a more rude and insolent aspect, accosted me thus: "I must have the keys of your cellars." This was immediately complied with, and a parcel of lumber overhauled to no purpose; from this place an egress was made, and this chief, with the daring air of a Turkish bashaw, ordered his raggamuffins to enter my dwelling apartment, where every private corner was ransacked: and although I warmly intreated and besought this fellow, who termed himself the head of the gang, to accompany those he ordered into my apartments, imagining him commissioned to oversee and prevent any clownish or indiscreet behaviour, all was to no purpose; he deigned not to enter. The result was, carrying off about twenty-one gallons corn-spirits, which I kept by me for the purpose of giving travellers on the road, who frequently come and go a-foot eight miles, for necessary causes, or for accommodating my few tenants upon emergencies, such as funerals, festivals, or the like; and which is the sole recruiting cordial they have through the year, as my country cannot admit of strong ale or beer, the grain it yields not by far serving the inhabitants for bread; and hundreds, I had almost said thousands, given out for oat-meal annually. This, truly, is one species of oppression, almost intolerable in a land of liberty; and I begin to cease being astonished or amazed at my fellow-subjects flying from such unheard-of infringements upon it. What was the consequence of this petty seizure? — Why, I was told, before the fellows got to their vessel, they were mortally intoxicate with the fruits of their rapine, missed their way, and almost their lives; — so far from tending to any advantage to the revenue!

I am far from diminishing the crime of smuggling; very far! I think it a scandalous branch of trade, and fit to be suppressed: but let not an indiscriminate robbery be practised upon us under this pretence: let the extensive dealers in that way smart, as they often do with justice; only let not the punishment be inflicted in an insufferable manner, and contrary to law. I have

been

been told, that, over the kingdom, an officer, upon an information where contraband goods are deposited, must swear to the truth of his information, then obtain a justice of the peace warrant against the very spot where the goods are said to be lodged, and to search only that particular place. General warrants, in their very nature, are so crying an abuse of order and good government, that I thought they had been long exploded.—The revenue-officers are, many of them, men whose character I esteem, and who walk up to their duty in a becoming manner: they ought, however, to be cautious and observant of the conduct of their subalterns intrusted with authority. In the present case, I am credibly informed, that the commander of the yacht was a gentleman esteemed for many amiable qualifications, and who detested low or vulgar proceedings: but how often are individuals subjected to barbarous usage from the underlings in power, with which our country swarms, and who suck the wealth and honest industry of the poor, and ruin their morals by debauchery and bad example. This was conducted on no better authority than a deputation from the board of customs, and no other formalities asked or observed. If, then, the Honourable Commissioners shall grant such warrants, and employ a parcel of banditti to make an indiscriminate search into any gentleman's private apartments through the kingdom, and that it may be exercised through mere wantonness of power, I, though old and infirm, must yet forsake my country, nearest and dearest connections, and seek for liberty, so connate with the human heart, though it were in the wilds of Tartary, or forests of Dalecarlia; for, under the name of rank despotism, more arbitrary proceedings cannot take place. And I wish the wise council of the nation may, at their new sitting of parliament, check these and other such abuses of power; or my general advice shall be, to the whole district, to elope from a country no longer the boast of freedom, but the sink of licentiousness.

If my notions of restraint on the conduct of revenue-officers be wrong, I beg to be set right, and to have the laws in such cases plainly depicted. I shall point out the offenders names in the present case when desired, in order that their conduct may be inquired into by the worthy and good at the helm of affairs; for *Veritas* is my motto.

Yours, &c.

THULE.

NUMBER THIRD.

Copy of a letter, which also appeared in the Weekly Magazine, November 17. 1774, containing remarks on the nature of the fishery for dried ling, &c. in the Western Isles.

S I R,

AS your Magazine is the channel of conveying any extraordinary occurrences that happen in the kingdom, and the only way that uncommon grievances can reach the public ear, from persons so situated as to be debarred legal redress without expences, which possibly their finances cannot afford, permit me to occupy a small part of your Miscellany with a narrative, which shall at least, if void of every other embellishment, be sincere truth.

I have now been near thirty years employed in the mercantile way on some northern islands of his Majesty's dominions, where the inhabitants carry on a considerable branch of the fisheries, and enjoy the bounty conferred by act of parliament, of three shillings per hundred weight on ling, cod, and tusk fish, exported to foreign countries. This indulgence, when seasons are benign, and markets abroad tolerable, enables the individuals to live with decency and ease, notwithstanding Nature has not been liberal to them as to soil, climate, and other benefits accruing from agriculture. Indeed I am apt to think, that even this would be considerably improved upon in spite of the seeming difficulties before suggested, but that the bulk of the people have been, and are, accustomed to go upon the fishing during the summer-season, and are thereby denied the means of cultivating their grounds properly, or providing manure, which is to be got at that time of the year only.

The gentlemen who have property in these islands, oblige their tenants or farmers to fit out boats, lines, and other apparatus for the fishing, and give them a certain allowance for every fish they bring on shore. These who have little or no property are at the expence of every appurtenance: and to give an idea of the amounts, the following is no-wise aggravated.

To

	L.	s.
To expence for a six-oared boat new fitted out, mast, fail, &c. is	6	0
To ordinary wages for six men during two months of summer,	6	0
To tackling, lines, hooks, &c. at a mean compute, - - -	5	0
To 3 bolls 12 lispds meal, <i>communibus annis</i> not under - - -	2	0
To contingencies, bed-cloaths, cooking utensils, Midsummer feast, and Lammas farewell-feast, - - - - -	0	12

L. 19 12

From which view of the matter, which can be ascertained by men of candour as strict truth, the precarious gains arising from this branch will be found insignificant. I have myself for many years launched out a considerable subject in this way, and, one year with another, cannot boast of returns equivalent to the outlay, at an average. Three hundred ling-fish are esteemed good fishing for a boat; many times below, but seldom, for my own share, have I experienced it rise above. The people who go on their own venture I allow sixpence for each ling as they run, and take the whole charge of apparatus upon myself. The markets I generally send them to are, Hamburgh in Germany, and Barcelona in Spain: if they render nine stivers each ling, it is the utmost; and, indeed, they must be large when this arises of free money to the vender: so that, when salt, curing, and transporting these fish to the different loading-creeks in the islands, is considered, it must appear to the world, that if it were not for the gratuity conferred by government, that branch behoved to be given over, and the Dutch must monopolize the golden harvest of our coasts.—After what is premised, I now come to the design of this letter.

The Honourable the C———s of C———s have thought expedient this year to issue forth peremptory orders to the shipping-officers in these islands, not to certify any fish to a foreign market as intitled to the bounty of three shillings per Cwt. excepting they are dry, merchantable, and not salt-burnt; and this without exception of what markets they are appointed for, or allowing any to judge of the quality of the fish, save the shipping-officers: so that, by this arbitrary detrimental plan, matters are like to be conducted to the infinite prejudice of the merchant.

For above fifty years, matters have been carried on agreeable to the spirit of the act of parliament, and the views of the legislature in framing such act have been fully answered, without fraud or sinister arts employed by the trader or merchant. When seasons are backward, and the fish not sufficiently dried, the officers were permitted to make deductions of five-pence per Cwt. upwards or under, as they thought circumstances required; and in this the merchant cheerfully acquiesced: but, by the present mode, no alternative is left; — the bounty must be entirely superseded, and many industrious and helpless individuals rendered bankrupt, who, like myself, have little else to depend upon. Can it be supposed, or rationally suspected, that the merchant, for the views of obtaining this bounty of three shillings per Cwt. on fish, would risk his whole subject, for which he expects at market thirteen or fourteen shillings per Cwt.? Can, I say, (allowing him to be the most ungrateful of men, which surely he must, if he harboured a thought of abusing the goodness and benignity conferred by government), a thought so inconsistent with his own interest be with any propriety entertained? Here self and the public are so linked, and obliged to co-operate, that it appears the most surprising thing in nature for the Honourable Board to hint at suspicions of fraud or duplicity.

Different markets require distinct qualities in the fish: The Germans want them to have abundance of salt; and if they are smooth and white, though not hard-dried, they answer that market best. Spain, being a hot climate, where salt, at least oversalted fish, would soon ruffle and spoil, requires the ling to be moderately salted, and of consequence to admit thus being dried to the consistence of bone, which every connoisseur in the fish-trade must know is impracticable with fish liberally salted; for, dry these fish as you will, by a night's confinement in a warehouse, or any close place, the salt will occasion a dampness, to appearance as if not thoroughly dried. Now, in this dilemma, what are the merchants and fish-curers to do? Spain cannot exhaust all their fish; they are debarred sending them to the next proper place; or, if they do, the bounty conferred is withdrawn, and the proceeds in such case cannot indemnify the proprietor for his expence and prime cost.

Where shall the sufferers appeal? All arguments with the shipping-officers, from a sense of duty, or perhaps caprice, are vain: they are so and so enjoined,

ed, and they will not risk their offices by counteracting the Commissioners orders. They acknowledge the seeming absurdity of this measure; yea, they acknowledge, that the fish exported to the different markets for preceding years have been the same in quality as are now refused to be certified, but redargue their instructions.—It were to be wished some of the gentlemen in authority were readers of your Magazine, who would, I am confident, be shocked at such an unusual stretch of authority all of a sudden exercised by the Hon. B——d of C——s. They, for many years past, have been throwing obstructions, which have a tendency to hamper and curb the merchants in these islands: they have loaded government with a new expence of sending over yearly one or other officer, under the name of inspector, who, if I am not wrong informed, have an allowance of ten shillings Sterling *per diem*, by and attour his or their ordinary salaries going on; and it is no doubt natural to think, that their reports, in order to appear necessary, may instil prejudices into the ears of their constituents.

But, whatever may be in that, I dare be bold to say, from long experience, that there is not in Great Britain more accuracy or integrity manifested in any branch than in the fish weighing from these islands. And what makes an aggravation of this superfluous expence of inspectors, &c. is, that we have at the head of our customhouse here, a gentleman who would do honour to a higher department; and whose conduct is irreproachable, as he is remarkable for good sense and every moral duty.—If the Hon. Board mean to pay these extraordinary officers by curtailing, or rather totally withdrawing, the munificent and free grant bestowed as an encouragement on the fisheries, they, it is likely, will gain their ends. I hope, however, that matters are not brought entirely to this dilemma; and that the Hon. board, or, if they shall decline it, that the Lords of the Treasury, will consider of, and put a stop to such lawless and uncommon exertions of power, to crush a whole country. I again ardently pray, that these hints may fall into the hands of some benevolent person who has the power, and will look into this grievance, with many more incumbrances to trade which these islands have groaned beneath for a series of years; — for numberless they are, and shall be fully represented in some future paper. Yours, &c.

MERCATOR.

N. B.

N. B. Why such a stir about the white-fishing bounty, when two Greenland vessels equal the whole sum expended on debentures for the whole northern islands?

[I heartily join in the same prayer with this seemingly sensible person.— It is a pity he has not yet fulfilled his promise].

NUMBER FOURTH.

Copy of a Letter, which also appeared in the Weekly Magazine, 1st June 1775, containing a very particular historical account of the ancient and present state of the Zetland isles, with the various hardships they have been made successively to undergo from the unjust avarice of their superiors.

S I R,

YOur having given room in your useful publication to my neighbours *Thule* and *Mercator*, containing complaints of some particular hardships the country of Zetland labours under, gives me hopes that you will allow the more general complaints thereof to have the same chance of reaching the ear of the public. *Thule* observes, “It is better to emigrate to unknown and uncultivated countries, than to remain in a land where the inhabitants are invaded in their most essential privileges: their houses and most retired apartments are exposed to be searched and violated by the lowest class of men who bear a deputation from the C——s of C——s, and have no other warrant whatever; but, assisted by still a lower class of mariners, carrying naked swords and pistols in a country where swords have long been converted into sickles and scythes.” This is a grievance, no doubt, peculiar to this country; but it is well with him that he has the means of emigrating in his power. As to the generality of the householders in this country, I maintain, that not one in forty of them have it in their power to emigrate with their families, for want of money, and the subjects to raise it from, to pay even the present low freight to America; and therefore the aged must remain in a state
of

of increafing poverty till death mercifully relieves them. To point out fome of the various caufes of this general poverty is my intention.

These iflands, lying betwixt 60 and 61 degrees 10 minutes north latitude, are comparatively barren, the beft crops never affording black oats and bear (the only grains fown) to ferve the inhabitants three fourths of the year; and often the crops are fo bad as not to maintain them one third of the year, though their allowance of bread is much lefs than in any other country. There are no trees, and their fifhings are their only refources to enable them to provide the neceffaries of life.

In this fituation thefe iflands have long remained. They were fubject to the crown of Norway till *anno* 1469; when, in the marriage-contract of King James III. of Scotland, with Margaret, daughter of Christian I. King of Norway, they were mortgaged to James for a part of his Queen's portion, redeemable upon payment of 8000 florins. In this treaty and contract, it was exprefsly ftipulated, That, whilft thefe iflands remained in the poffeffion of Scotland, no innovation fhould be made in their laws and constitution; and every immunity, freedom, and privilege, fhould be preferved to the inhabitants; and no impofition, tax, or duty of any kind exacted from them, other than the *fcatt* in ufe to be paid to the crown of Norway yearly, being a fixed rate payable from the lands when laboured; and in whatever future contracts betwixt James IV. and VI. and Denmark, anent thefe iflands, their privileges and immunities were exprefsly referved; long experience having rendered it incontestable, that they would never be able to pay more, unlefs they became, by fuch encreafed payment, in the moft abject ftate of poverty.

The lands of this country are divided into rooms, each room confifting of a certain number of merk-lands from twelve-penny to four-penny *per* merk. Each penny is valued at one and one third merks of butter, and one and one third fhilling Scots of money, thefe being reckoned of equal value; fo that lands eftimated at twelve-pennies *per* merk-land, pay fixteen merks of butter and fixteen fhillings Scots of money; ten-penny, nine-penny, fix-penny, and four-penny lands in proportion. This is payable to the landholders, who have generally laid on a graffum of eight fhillings Scots *per* merk of land, of whatever number of pennies it may confift. One merk of butter is the

twenty-

twenty-fourth part of a lispond; the lispond was then, as it is still in the neighbouring countries of Norway and Faro, eighteen pound weight; so that one merk of butter was twelve ounces. Besides this payment to the landholder or proprietor, the natural possessors of lands, who were almost all of them proprietors of their possessions, paid the corn-teind [tithe] partly in butter and partly in oil (and in some rooms the teind of the corn was drawn) at a certain fixed rate for each merk of land. Oil measured by canns did not exceed two Scots pints [two gallons English] to the cann. In many places a part of the scatt was paid in butter, and the cow-teind was always payable in butter, at the rate of three merks of butter for a calf and cow. In this state matters remained for some time, and the inhabitants frugally subsisted in a state of mediocrity.

In the beginning of the sixteenth century, while Popery darkened the land, their religious traders found means to beg from these islands some money, under the name of a *wattle*, for the extraordinary benefit the people were to have from the holy water being liberally distributed among them, as the term sufficiently indicates. This payment, or gratuity, was to be continued only a few years; but when, in the reign of King James V. the rents of these islands, payable to the crown, were given for the support of his natural son Robert Stewart, abbot of Holyroodhouse, afterwards Earl of Orkney, and then to his son Patrick, they not only continued, but encreased this imposition; and at this day the country pays above 800 l. Scots yearly in name thereof. These two Earls, taking advantage of their influence at court, and the distance of the Zetland islands from the seat of government, committed innumerable acts of oppression, and in such instances as would not now obtain credit, whereby they took to themselves near one third of all the lands in the country; which, on their forfeiture, returned not to the true proprietors, but remained with the crown.

Anno 1600, Earl Patrick Stewart built the castle of Scalloway, the walls whereof remain still entire. The oppression he committed in Orkney and Zetland, for services to this house, are yet remembered; one of which was, his compelling the inhabitants of Zetland to deliver nine oxen and 122 sheep yearly for the support of his table. Among other acts of oppression and violence, these Earls encreased the weight of the lispond and merk of butter to

at least twenty-two pound to the lispond : and although, upon complaint of these oppressions, their other conduct was enquired into, and they both justly condemned to the punishment of treason, and suffered accordingly ; yet these exactions were continued, and do continue to this day, rather encreased than diminished.

Matters remained nearly so until the rebellion in Charles I.'s reign. In these times of rapine and confusion, this country fell into the hands of the family of Morton, whose factors or chamberlains raised the weight to twenty-four pound to the lispond ; and now the country, not being able to make so much butter as pay the rents in that kind, conform to the encreased weight, they found means to establish a fixed price on the butter not delivered in kind, more than double of the original rate, viz. fifty-eight shillings Scots per lispond : and it is to be observed, that the instrument used for weighing was and is called by its original Norwegian name, a *bismar* *, being a sort of wooden steelyard, and of all weights in use the most liable to deceit. The chamberlains assumed to themselves the power to appoint a man in each parish to weigh the butter, and measure the oil. This person was paid by them, and removeable at pleasure. The weight remained on this footing till anno 1694, or thereabouts, when Colonel Robert Elphinstone of Lopness procured the chamberlainship. He raised and established the weight at twenty-six pound to the lispond ; and, in 1736, Mr Andrew Ross, then factor for the Earl of Morton, sensible of the most egregious iniquity practised on the inhabitants by weighing on the bismars, (some of which he found to be set at thirty-six pound to the lispond), proposed to the landholders to have this instrument laid aside, and the known weight by scale and beam to be established ; and prevailed in having the lispond settled at twenty-eight pound ; to which some of the landholders consented : and it was agreed to, and ordered by him, that the tacksmen of the crown-rents, and other receivers of teind and scatt butter, &c. should not take any greater weight, under the penalty of 500 merks Scots for each transgression. And the fifty-eight shillings Scots as the penal price for every lispond of butter not delivered in kind,

* This seems to be nearly the same with what was formerly known in England by the name *auxcel* weight, long ago abolished by law.

remained unquestioned; which, in some measure, lightened the burden of the former oppressive encreased weight.

The crown-rents were then and since farmed out by parishes to the highest bidder; and the receivers of butter have gradually, by imperceptible additions, raised the weight, except in one or two ministries, to thirty pound to the lispond, and the cann of oil to two one fourth pints; and it is now, in 1775, openly contended, that this encreased weight and measure shall not only remain and be fixed, but also that this justly-abolished, and scandalously unjust and deceitful instrument, the bismar, shall be restored; and further, that this long-established penal price of 4 s. 10 d. Sterling for each lispond of butter, not delivered in kind, shall be broke through, and the very highest price for this encreased lispond shall be the rule of payment; and no less than 7 s. 6 d. Sterling is exacted for this lispond; which, if it had remained at its original weight, would not, at the present advanced price of butter in almost all countries, have exceeded 4 s. 10 d. Sterling. And it is remarkable, that, some years ago, when this grease-butter could not be sold higher than 3 s. Sterling per lispond, those that delivered a little more to the chamberlain than they were liable in, had only that price allowed them, at the same time that others, who could not deliver their full proportion, were charged fifty-eight shillings Scots per lispond for the deficiency. These payments were and are made by the tenants; which perhaps facilitates the imposition, as they were the first sufferers, and their farms are small.

It is in fact too true, that, however hateful in the sight of God and man, every act of oppression is, especially those that affect the latest unborn generations, yet succeeding chamberlains and factors have always, not only used their utmost authority to continue the payments they found had been made, but likewise most of them have raised some additional payment, though otherwise men of fair characters, and in private life of great humanity; this seeming to be always looked upon by them as the surest means to recommend them to the favours of the crown's donatars, who have always had interest at court, or lucrative offices in their own disposal or recommendation.

Until anno 1748, the chamberlains of Zetland had always been vested with the supreme authority within the country, both in criminal and civil jurisdiction,

jurisdiction, and with the vice-admiralty thereof, and, for forty years by-gone, with the first office in the customs; so that they have always had the means to bring opposition to silence, if not submission. At present the crown-rents amount, in the articles of butter and oil, to 1700 lisponds of butter, and 1800 canns of oil; and that part of the ministers stipends to 1600 lisponds of butter, and 4900 canns of oil; which makes in all 3300 lisponds of butter, and 6700 canns of oil; the clergy having never been behind in taking the same weight and measure the crown's donatars did; so the increase of weight and measure of butter and oil is not less than 2300 lisponds at eighteen pound to the lispond, and 837 canns of oil. Now the whole butter made in the country cannot equal one half of these payments to the crown and kirk, though the landholders get none; and a little management betwixt these two may raise the grease-butter of Zetland to as high a price as the best butter in England gives, if once the established price of 58 s. Scots per lispond is broke through. And although there are sufficient teinds to raise competent stipends to the ministers of the gospel, arising from the corn-teind, cow-teind, wool and lamb teind, and considerably more than is paid them at present, or can be reasonably allowed them by any future decreets of augmentation; yet, contrary to all good order, and maxims of law and policy, that industry never be taxed where there is other sufficient means, the fishings, on which this country chiefly depends, are severely taxed, and rated very high, towards payment of the stipends, and as rigorously exacted: for where ling-fish is in use of payment, twelve or eighteen ling for each fishing-boat is exacted, and is rated in place of three pence Sterling for each; yet, when bad fishing or accident prevents the payment in kind, the poor fisherman is said to be greatly favoured if he escapes with the payment of five pence or six pence per ling. Two ministries are happy, in that, by use of payment, the fish-teind is settled at so much money per boat, and the corn-teind at a certain rate of money also per merk of land.

I have said above, that these islands were to remain for ever free of all taxes, impositions, and duties, other than the scatt, while they remained under the dominion of Scotland; yet the sad truth is, this restraint was soon broke through: for the farmers of the land-tax, during the commonwealth in Cromwell's time, extended the exaction to this country. This oppression

was continued by the arbitrary council of Scotland in the reigns of Charles II. and James VII. Sometimes the country would remonstrate; but, having no representation in parliament, military distress was the only answer; and now it is assessed with Orkney in a certain proportion of the land-tax. At present, and for many years bygone, every branch of duties, customs, and excise, under which even England's opulence groans, has been and is levied here. Formerly they were allowed to import corn from any neighbouring country they found most cheap and convenient: now they cannot have it but at the advanced price which presently threatens to depopulate Scotland by emigration, with the addition of freight and other charges, that will soon render it out of their power to pay, being, by repeated bad crops, reduced to the lowest ebb.

This country has long enjoyed the bounty on export of fish at 3 s. Sterling per quintal or hundred, which has arisen from 800 to 1400 l. per year. Now this is considerably abridged by order of the C——s of the C——s, imposing qualities on fish never before heard of, and reducing the bounty to five shillings for six score of ling, which will not defray the duties on salt, and the customhouse-expence on shipping the fish. This country, being by these, and some other hardships, (to enumerate which particularly would, I am afraid, lengthen this too much for you to give it room), reduced to a general state of great poverty, at a period when almost all other parts of the growing empire of Great Britain have increased in riches, is yet, because of this poverty, in no danger of being suddenly deserted by its inhabitants, they having good will to emigrate in cargoes, but have not the means. However, there is another kind of emigration, which takes place yearly, I had almost said daily, no less ruinous in its consequences. — The young men, finding themselves brought up in want of necessary food and raiment, and that their utmost endeavours, in spite of industry and frugality, will not enable them to provide the necessary means of support, leave their fathers to their fate, and go abroad, or into the sea-service, of late mostly with the English Greenland ships, many of whose captains, coming from home without having the legal complement of men, find it necessary to hire as many here as make up their muster-roll on their return, to entitle them to payment of the legal bounty, and carry away many that are pre-engaged in the country-people's service,

service, who are thereby often greatly distressed. There are no means here to compel those captains, at the head of forty or more men, to listen to equity, and make them do as they would be done by.

The fishermen, exposed to the greatest hardships and fatigue, in their open boats, from the inclemency of the weather, never can have a drink of ale or beer. They have been in use to get from those who purchased their fish an allowance of low-priced corn-spirits, and also bought a little themselves. This is now not to be had at a moderate rate; and every article, even of the fishing-apparatus, is loaded with other duties.

By these, and various other causes, this country is reduced to great poverty, and daily encreasing, from which it has no prospect of being relieved, unless the Almighty influence those who have it in their power to have also the will to apply suitable remedies, while yet they may avail, to save it from desolation, and to restore it to that state of mediocrity it has formerly enjoyed. Opulence its northern situation will never admit of. It can hardly be supposed, that the British legislature, if duly acquainted with these matters, would, for the small sums raised from this country, of cels, excise, and duties, continue to load them therewith; but, to these, and other just complaints, show that feeling and sympathy which has always been the characteristic of that august body.

If, by your publishing this, well-disposed people may think it worth their pains to make enquiry, and consequently to apply remedies, they and you will not fail to share in the blessings of the poor ready to perish; and you will much oblige, Sir, Yours, &c.

March 24. 1775.

ZETLANDICUS.

In the eye of justice, the meanest individual ought to be equally respected with the most exalted chief. — In the eye of humanity, the humble complaints of the helpless sufferer will be much more respected than the blustering threats of those who are able to vindicate their own rights where they shall be attacked. If the almost groundless complaints of the Americans are respected, surely the real grievances of the helpless inhabitants of Shetland ought not to be wholly overlooked.

I know not any thing that would more exalt a British minister, than to search out and remove the hardships under which the helpless parts of the nation labour, who only sigh in secret over the ills they are doomed to suffer, and who have none to plead their cause before those in power. To redress the grievances of the rich and powerful may proceed from fear as much as justice or generosity; to succour the weak and the needy can only proceed from a truly magnanimous soul, which delights in acts of beneficence and mercy.

T H E E N D.



A D D E N D A.

Containing, Some Hints, relating to the Measures proper to be adopted by Gentlemen of Fortune who mean to promote Manufactures by granting Pecuniary Assistance to Manufacturers.

Since the foregoing sheets were printed off, a friend who has perused them started the following objection. "You endeavour to prove, says he, in Letter Fifteenth, that men of superior rank can only encourage manufactures through the medium of others. But methinks you leave the proposition on a too general footing. Many individuals, who may be desirous of promoting improvements to the utmost of their power, and who may be convinced of the justness of the observation, may yet be at a loss to know in what manner they ought to proceed, so as most effectually to encourage particular manufactures, and at the same time not to hurt the interest of those who are disposed to encourage them. General rules, he added, are of the utmost utility; but to make them be fully understood, it is necessary that they should be illustrated by particular examples."

As I was satisfied of the justness of this remark, and as I am desirous of affording every information in my power, I shall endeavour, in the following pages, to illustrate the foregoing general position by some particular examples; —although I must premise, that in all cases circumstances will occur that could not be foreseen, on which emergencies the persons concerned ought to act in a conformity with some general principles; and the general principle that should prevail in all cases, I have endeavoured to show, is the following, viz.

That every effort should have a tendency to diminish the expence to the manufacturer as much as possible.

It ought, therefore, to be the study of every one who wishes to improve manufactures, to enable the several manufacturers to carry on their employment in the cheapest and easiest manner possible for themselves.

But manufacturers who work separately for their own behoof, and who are enabled to avail themselves to the utmost of their own small stock in trade, will exert themselves more than in any other situation; and consequently be able to afford their goods, upon the whole, cheaper than any others.

Hence, therefore, no one who wishes to encourage manufactures, should attempt to do it by erecting large works, carried on at a great expence, by hirelings, under the influence of persons ignorant of the business; as this must tend to increase, instead of diminishing the expence.

Let us suppose, that a private gentleman, or a public company having a joint stock, should resolve to encourage the woollen manufacture, and to employ some money for that purpose, it seems to me that their design might best be effected in the following manner.

A fit place being chosen to carry on the manufacture, — and a manufacturer who understood the business fully being found, — it belongs to the proprietor of the ground to erect the necessary buildings, and to furnish other particulars for his accommodation; for which the manufacturer should become bound to pay a certain moderate rate of interest by way of rent; having a lease for a reasonable time, or a perpetual feu. If the manufacturer is a man of discretion, these houses will be erected at a very small expence, and in a commodious enough manner; — the disposing of the several parts of the plan having been approved of or suggested by himself.

Skilful manufacturers may often be met with, of enterprising dispositions but small stock: these are the persons to be searched for. To enable them to carry on business, it is necessary that they should have the command of money; and it is necessary also, that the monied men who advance that, should have perfect security, that they cannot lose by advancing it for the manufacturer.

facturer. The great difficulty is, to contrive matters so as to give the lender perfect security, and not make it burdensome for the manufacturer. For if the lender run any risk of losing his capital, he will demand, and ought to obtain a very high interest for his money to pay for an insurance-premium. But this very high interest discourages the poor manufacturer, and puts him very far below par with richer manufacturers, who have stock of their own, — and by consequence ruins him.

Observe, — I reject every idea of encouragement being given by way of charity. — The hand of Charity is cold, and soon slackens its operations ; it is therefore inefficacious in all cases, and never ought to be relied upon. I look upon it as a first principle, *That unless the encouragers of any public undertaking are to be at least no losers by the encouragement they give it, that undertaking never can succeed.*

If manufacturers could buy the materials upon which they are to work at all times at a moderate price, in small quantities as they successively needed them, they could often go on with spirit with a very moderate stock of their own. And if monied men were to buy materials necessary for carrying on that manufacture they wished to encourage, at the first hand in wholesale, and store them up near the habitation of the manufacturers, and to retail them out at a moderate profit, — those who advanced the money might receive a reasonable interest for it, and the manufacturers be at the same time very much encouraged. It is in this way, therefore, that the stock of those who are not manufacturers themselves could be most usefully and safely employed in promoting manufactures.

If one, two, three, or more expert clothiers, were established within a moderate distance of one another, in a situation properly adapted for the business they carried on ; and if several monied men should resolve to support them ; these monied men, though totally unacquainted with the manufacture, and unconnected with it in detail, might, by adopting this plan, be made certain of obtaining as good interest as they could draw for their money by lending it in any way, — and their security would be almost as undoubted as

if it were deposited in any person's hands to whom they could lend it. For as they would always have the whole stock on hand, (for they need give no credit in the retail-trade, unless they thought themselves perfectly safe), they could never lose their stock; and no manufacturer could grudge to give such a price for the goods as would be sufficient to yield them at least *legal* interest for their money, after paying insurance-premium, and all charges. — Nor ought any gentleman to wish for more; for it would frustrate the aim if this was undertaken as a project of trade for immediate profit.

Let this last circumstance be duly attended to; — because, if it is not, it is vain to attempt establishing manufactures by pecuniary assistance. Few persons chuse to employ their money in any way, except by lending out at interest on security, by bonds or bills, unless they hope to get very great returns for it; and therefore most attempts of the kind here mentioned, are considered as projects of trade, by which great profit may be made. But if the security is as good as that by bond or bill in ordinary cases, a *certain* profit, that should be equivalent to the interest that could be drawn in ordinary cases, ought to satisfy the undertakers. — Let merchants employ their own capitals in the most advantageous way they can, — I am here speaking to monied men who would be well pleased to have their stock lent out on good security at ordinary interest, as it is those alone that ought to think of entering into a project of this kind.

If then a moderate sum was obtained, and employed for purchasing, in Spain, (if that should be thought necessary), or elsewhere, — fine wool at the first hand; and if it were imported directly to the place of manufacture; — and in the same manner if oil, soap, and dye-stuffs, of the very best kinds, were obtained at the first hand, all to be retailed out to the particular manufacturer whom it was meant to encourage, at reasonable prices, so as to answer the purposes above mentioned; it is difficult to say what might be the advantages that would accrue to the manufacturer from this circumstance alone. And so little money would be required for assisting a single manufacturer or two, that any gentleman of fortune might do it for a few industrious persons that he might think proper to have settled on his estate; and he would thus
essentially

essentially promote his own interest, without drawing any profit from his retail-trade. Legal interest I consider as no profit.

The benefit would be still greater, however, if a monied man, or society of gentlemen, having a joint stock, should agree to receive into their warehouse any quantity of wool that might be bought by the manufacturers, and upon such consignment to advance on their account the whole or the greatest part of the price. The wool to be taken from the warehouse in small quantities as the manufacturer had occasion for it; he paying the full price of each parcel as he took it away, together with 5 *per cent.* (or any other rate of interest that might be thought reasonable) *per annum* for the use of the money during the time it had been in advance by the society. This would put it in the power of the manufacturer at all times to seize the opportunity when a good bargain should come in his way, even when his coffers were not full; and every one knows of what benefit this might be on some occasions. To prevent a possibility of the company being endangered by this particular, it might be necessary to fix on a certain price that they would advance *per stone* for wool received, and no more; and let this be about the rate of the lowest-priced wools in the neighbourhood.

It would be still an improvement, if they should further make it a rule, that in case at any time, from a stagnation of trade, the manufacturer should find difficulty in disposing of his wrought goods so fast as was necessary, to allow him to carry on his operations with his usual spirit, they should then accept of manufactured goods into their ware-room, in lieu of the raw materials that he might have occasion for for carrying on his manufacture;—these manufactured goods being rated to the society at not more than two thirds of their usual selling-price; the manufacturer having full power to call for them when he had a-mind, and to take them away when he should incline, on paying the money which had been advanced upon them, together with 5 *per cent.* (or any other rate of interest agreed upon) for the time it had been so advanced.

If this society's ware-room were in a public market-town, it should be open

pen for so many hours every market-day, during which time the manufacturers should have liberty, without any expence, to call for a sight of their consigned goods, and show them to merchants, and sell them, if they could agree upon a price; the money to be paid to the clerk of the warehouse; who, after satisfying the demands of the company upon such goods, should return the overplus, if any, to the manufacturer.

If it was in a more remote part of the country, the manufacturer should have access to them for the same purposes on certain days appointed for that use.

If the manufacturer was situated in the neighbourhood of a considerable place, in which a bank was established, it would be no difficult matter to get bills discounted when the clothier should have occasion for it.—If it was in a more remote corner, it would be of great utility for the manufacturer, if the society should settle a correspondent at the nearest banking-town, who ought to have it in charge to correspond with, and transact bills for the manufacturers when it should be necessary. This would be a most powerful encouragement to them. Good roads, and regular communication with other parts of the country, by post, would, on this account, and many others, be of the greatest utility.

It is of very great importance that manufactures should be established within a moderate distance of some market-town, where provisions, and other necessaries, may be bought at least once a-week. Therefore, if no such market is already established, it should be an object for the encouraging of these manufactures to establish such a weekly market, if possible, in some convenient place; — and to see that it should be as well supplied as the nature of things will admit of.

If a number of independent manufacturers were thus induced to settle in any part of the country not far from one another, each working for himself, the same company and the same warehouse could with great œconomy serve the whole; as attendance would only be required at the warehouse during the market-day. Still less attendance would be necessary in private cases of this kind, when meant to support only one or two operators.

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In that case it would also be proper to have a weekly market for manufactured goods, at which the different manufacturers would compete with one another, which would beat down the price as much as possible, and thus increase the sale.—— In countries that are more thinly inhabited, these market-days would occur more seldom, in which case they would be called fairs. These might be once a-month, or quarter, or half-year, as should suit the circumstances of the place best.

The warehouses I have proposed would enable the several manufacturers to wait, without embarrassing themselves, till the fair should arrive.

I shall not extend these observations farther; as a very little attention will be sufficient to discover in every place what other helps would be proper for increasing the manufactures of that particular place.

The advantages that would attend this plan of encouragement are so obvious as scarce to need pointing out.—— Every manufacturer would in this case be left at perfect liberty to pursue his business in the way that he found most advantageous to himself; and to adopt such improvements as his own genius might suggest, and to reap the full advantage of his industry.—— He would at all times find materials proper for him at hand, of the best quality, and at a reasonable price; and might purchase just so much of each, and no more, as he should have occasion for at the time.—— He would never be at a loss for cash, if industrious and skilful; and would have no occasion to be called off from his business by any extraneous avocation; and all these benefits would be procured without any charge to any person whatsoever.

If, along with these conveniencies, the manufacturers were secured at home from every species of oppression from private individuals, (which is a *sine qua non* in this case), there can be no reason to doubt but ingenious men, with skill as their chief portion, would flock to such places from every corner of the country, and soon carry those branches of business they professed to the highest degree of perfection they would admit of.

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The only care then would be, to guard against frauds ; and perhaps the best method of doing that is, to oblige every individual manufacturer to mark every piece of cloth with his own name at full length ; and that not only at the end, but along the lists, at several different places, in a piece of cloth ; so that every man, when purchasing even a small quantity, should know the person who made it.

Another preservative would be, for the society to import none of those dyestuffs that yielded a perishable dye.

Much of the success of every undertaking of this sort depends upon the goodness of the dying, and cheapness of the materials for that purpose.— Nor is there any business that admits of greater improvement in point of œconomy than that of the dyer.— Many valuable materials for this purpose are among our hands, with the virtues of which common dyers are entirely unacquainted : many articles that are now bought at a very great expence, might be obtained much cheaper, and much better for many purposes, at home, than those that are imported from abroad.— Philosophical enquirers are daily making valuable discoveries in this art, which are neglected by artisans by not being known to them. On these accounts, I hardly know an institution that could promise to be of greater utility, at a small expence, than an office allotted for trying experiments in dying, to be put under the management of some philosophical enquirer, who should have it in charge to collect all the improvements in the art of dying that were successively discovered in Europe, and to try them, so as to prove how far they could be of general utility if adopted, and then to instruct our own dyers properly in that art. This, however, could not come within the sphere of any private adventurers. It ought to be a general, public, and lasting institution.



